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SECRETARY OF THE AIR FORCE**

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Volume 1**



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Flying Operations

EC-130J AIRCREW TRAINING

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This instruction implements (AFPD) 11-2, *Aircraft Rules and Procedures*, and AFI 11-202 Vol 1, *Aircrew Training*. It establishes standards for qualification, mission qualification, continuation, and upgrade training for aircrew members operating the EC-130J(CS) Commando Solo and EC-130J(SJ) Super J aircraft, EC-130(SJ) supported operations, other EC-130J variants and Backup Aircraft Inventory (BAI) C-130Js operated by an EC-130J (CS) flying unit. Any reference to EC-130J in this instruction applies to all EC-130J variants and BAI C-130J aircraft operated by the flying unit, unless a specific variant is identified. This instruction is applicable to Air National Guard (ANG) units. This instruction is not applicable to Air Force Reserve Command (AFRC) units. MAJCOMs/DRUs/FOAs are to forward proposed MAJCOM/DRU/FOA-level supplements to this volume to AF/A3O-AT, through

AFSOC/A3TA, for approval prior to publication IAW AFPD 11-2. Copies of MAJCOM/DRU/FOA-level supplements, after approved and published, will be provided by the issuing MAJCOM/DRU/FOA to AF/A3O-AT, AFSOC/A3TA, the user MAJCOM/DRU/FOA, and the Air National Guard Bureau (NGB) offices of primary responsibility. Field units below MAJCOM/DRU/FOA level will forward copies of their supplements to this publication to their parent MAJCOM/DRU/FOA office of primary responsibility for post publication review. **Note:** The terms Direct Reporting Unit (DRU) and Field Operating Agency (FOA) as used in this paragraph refer only to those DRUs/FOAs that report directly to HQ USAF. Keep supplements current by complying with AFI 33-360, *Publications and Forms Management*, paragraph 2.22.3. (bi-annual review).

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SUMMARY OF CHANGES

This interim change revises AFI11-2EC-130J, Vol 1, by removal of continuation training tables, ground training tables, and all event definitions which are now distributed in Ready Aircrew Program (RAP) Tasking Memoranda (RTMs). Tier waiver authority in accordance with AFI 33360, *Publications and Forms Management*, Table 1.1. (Tier Waiver Authorities) have been annotated as well. A margin bar (|) indicates newly revised material.

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Chapter 1

POLICY

1.1. General. This instruction provides for training management of EC-130J aircrew members. Training policy, guidance, and requirements are set forth for each phase of aircrew training. Training is designed to progressively develop the combat readiness of each aircrew member, while maintaining previously acquired proficiency. For the ANG portions of this AFI, the term “MAJCOM” is understood to be either AFSOC or National Guard Bureau (NGB) as noted.

1.1.1. Qualification Training (**Chapter 2**) qualifies aircrew members for basic, nontactical aircrew duties.

1.1.2. Mission Qualification Training (**Chapter 3**) qualifies aircrew members in an assigned crew position for a specific aircraft, to perform the command or their unit mission.

1.1.3. Continuation Training (**Chapter 4**) provides the capability for aircrew members to reinforce and build upon previous training and conduct Air Force Task List (AFTL), United States Special Operations Command (USSOCOM) Joint Mission Essential Tasks (JMETs), and MAJCOM Mission Essential Task (METs) based, combat-oriented aircrew training.

1.1.4. Upgrade/Specialized Training (**Chapter 5**) upgrades Mission Pilots (MP) to Mission Pilot Aircraft commanders (MPA) and all aircrew members to instructor and flight examiner status. It also provides aircrew members training leading to special mission event qualification or certification.

1.2. Training Objective. The overall objective of the aircrew training program is to develop and maintain a high state of mission readiness, facilitating immediate and effective employment in exercises, contingencies, limited war, and general war operations.

1.2.1. The training program must train aircrew in the skills, knowledge, and attitudes (SKA) required in accomplishing assigned missions. Regulatory/directive and authoritative sources of required information include but may not be limited to AFI 11-202, Volume 3, *General Flight Rules*, MAJCOM guidance, Mission Design Series (MDS)-specific instructions (AFI 11-2EC-130J, Volume 3, *EC-130J Operations Procedures*), FARs, ICAO SARPs, FLIP, FCG, NOTAMS, T.O.s, ATC instructions, and AFTTP 3-1. (T-1)

1.2.1.1. Commando Solo. The AFTTP 3-3, *Commando Solo, Combat Aircraft Fundamentals EC-130J*, provides the authoritative, standardized, and fundamental tactics, techniques, and procedures (TTP) for tactical employment of the EC-130J. This document is the primary source of combat aircraft fundamentals and FTU mission qualification courseware and instruction. The AFTTP 3-1, *Commando Solo, EC-130J*, provides classified and advanced, combat-/threat-driven TTP.

1.2.2. Command Relationship. Headquarters Air Force Special Operations Command (AFSOC) and NGB, in coordination with USSOCOM, will establish and supervise an aircrew-training program consistent with the policies and requirements of this instruction. (T-1)

1.2.3. The AFSOC/ACC Memorandum of Agreement (MOA) outlines the inter-command relationships and responsibilities regarding operations at the AFSOC Detachment of the USAF Weapons School (USAFWS).

1.3. Responsibilities. AFSOC/CC is responsible for overall management of Air Force flying training programs supporting Air Force Special Operations Forces (AFSOF) and United States Special Operations Command (USSOCOM) and will establish and supervise an aircrew training program consistent with the policies and requirements of this instruction. NGB will subscribe to this instruction or independently develop training policies that will be reviewed by and coordinated with FSOC. (T-1)

1.3.1. AFSOC/A3 is the focal point for all formal aircrew training management and is responsible for formal school training matters such as curriculum, standardization of training programs, and flying hour management (for programs supporting AFSOF and USSOCOM). NGB is the focal point for all initial aircrew qualification and is responsible for formal school training matters such as curriculum, and standardization of training programs. AFSOC/A3 will issue updated mission continuation training guidance via Ready Aircrew Program (RAP) Tasking Memorandum (RTM) as necessary to OG/CCs for implementation. (T-2)

1.3.1.1. AFSOC/A1/A4/A5/FM will coordinate their activities with AFSOC/A3 and the NGB/A3 to ensure adequate resources supporting aircrew training programs are available. (T-2)

1.3.2. HQ AFSOC/A3T, NGB/A3O, and 193 OG/CC are generally responsible for the oversight of EC-130J formal school training programs, including the development and execution of the formal school training syllabi and Programmed Flying Training (PFT). (T-2) The 193d Flying Training Unit (FTU) is responsible for conducting initial qualification, requalification, and upgrade training. (T-3) 193 OSF/OST is responsible for scheduling simulator refresher training for EC-130J aircrew, as well as AFSOC-assigned aircrew continuation training, per this instruction and *Education Training Course Announcements* (ETCA). (T-3) NGB is the final approval authority for formal school training syllabi and (PFT). (T-2)

1.3.3. AFSOC/A3T and NGB/A3O Responsibilities. (T-2)

1.3.3.1. Oversee all EC-130J formal flying training and mission ready ground training events.

1.3.3.2. Monitor quality of training for EC-130J students.

1.3.3.3. Coordinate prerequisite waiver requests for all EC-130J aircrew training courses.

1.3.3.4. Determine student training quotas required to maintain adequate EC-130J crew force levels.

1.3.3.5. Allocate and monitor student quotas for aircrew training courses supporting EC-130J units.

1.3.3.6. Ensure Standardization/Evaluation (Stan/Eval) trend analysis data is incorporated into formal aircrew training course reviews and RAP Tasking Memo (RTM) development.

1.3.3.6.1. Review and approve syllabi and Course Lesson Map (CLM) for all EC-130J formal aircrew training courses.

1.3.3.6.2. Review trend data on an annual basis for RTM development.

1.3.3.7. Review and recommend changes to ETCA for all EC-130J formal aircrew training courses.

1.3.3.8. Attend annual Program Flying Training (PFT) conferences, coordinate PFT issues, and monitor publication of PFT documents and subsequent revisions.

1.3.3.9. Validate Flying Hours Program required for all EC-130J aircrew training.

1.3.3.10. Monitor resources required to meet EC-130J aircrew training requirements and identify deficiencies in manpower, personnel, facilities, or training equipment.

1.3.3.11. Monitor graduate field evaluation programs per AFI 36-2201, *Developing, Managing, and Conducting Training*.

1.3.3.12. Review and approve syllabi and training plans for all EC-130J unit developed aircrew training courses.

1.3.3.13. Manage the contractor support for EC-130J aircrew training devices and courseware.

1.3.4. NGB/A1 Responsibilities. (T-2)

1.3.4.1. DELETE

1.3.4.2. Establish and maintain personnel assignment policies to provide quality aircrew instructor manning for MAJCOM training programs.

1.3.4.3. Determine and validate manpower required to support EC-130J aircrew training programs.

1.3.4.4. Complete force level forecasts for the next Presidential Budget submission plus the next Program Objective Memorandum cycle. AFSOC, in coordination with AFPC and NGB, will provide the projected number of assigned aircrew members for each time period, with corresponding authorizations and force turnover rates.

1.3.4.5. Determine and forward to NGB required force structure data for computation of advanced student authorizations needed to support formal aircrew training schools.

1.3.5. AFSOC/A5 and NGB/A3O Responsibilities. (T-2)

1.3.5.1. Manage the acquisition and modification of EC-130J aircrew training devices and courseware.

1.3.5.2. Program sufficient funding to satisfy identified deficiencies in EC-130J aircrew training and maintain concurrency between aircraft and aircrew training devices.

1.3.6. FTU Responsibilities (193 SOW, 193 SOS, 193 OSF). (T-3)

1.3.6.1. Overall operation, logistics, and administration of EC-130J formal training courses.

1.3.6.2. Conduct and monitor EC-130J formal training to meet all course objectives and standards. This includes monitoring and adjusting syllabus content and quality as well as

PFT quantity to produce aircrew members qualified to perform the mission. The annual Training Review, Syllabus Review, and PFT Conferences are the primary conduits for significant changes.

1.3.6.3. Administer end-of-course critiques and graduate field evaluations. Forward a summary of all critiques and evaluations to AFSOC/A3T for review. Coordinate with AFSOC/A3T to ensure formal school graduates meet unit requirements.

1.3.6.4. Maintain a class roster of student entries and graduates for each formal course. Award AF Form 1256, *Certificate of Training*, to graduates per ETCA. Maintain a record of certificates issued, to include graduate's name, rank, course completed, course number, dates of course entry and completion, and automated personnel data system (PDS) course code.

1.3.6.5. Prepare, review, and forward all syllabi to NGB/A3O for coordination. Syllabi will contain a brief summary of revised, deleted, or added material and a resource impact statement (flying hours, manpower, facilities, etc.). A signed copy will be forwarded to AFSOC/A3T.

1.3.6.6. Review ETCA and determine if changes to the course announcements are needed. If so, coordinate with NGB/A3O and submit appropriate changes.

1.3.6.7. Notify NGB/A3O and gaining unit, in writing, when student graduation dates are extended 30 days past scheduled, or if students will graduate without completing all syllabus-training requirements.

1.3.6.8. Forward all training records to the student's gaining unit, or unit of assignment, within 30 days of graduation.

1.3.6.9. Prepare quarterly report of student training status and forward to NGB/A3O.

1.3.6.10. Conduct biennial (every two years) syllabus reviews and update courses appropriately.

1.3.6.11. Initiate, track, review, and close out aircrew training folders, forms, and career training folders IAW Chapter 6.

1.3.6.12. Coordinate with servicing Military Personnel Flight (MPF) to ensure the individual acknowledges any Service Commitment required for in-unit upgrade training and the Service Commitment is properly processed once training is complete (see paragraph 1.5.).

1.3.7. Wing/Group Responsibilities (Wing/Group/OSF). For the purpose of this instruction, the 193 SOS/CC may assume 193 OG/CC responsibilities and authority in the event of 193 OG/CC unavailability. (T-3)

1.3.7.1. By letter of appointment, should assign a minimum of one officer and one NCO aircrew member per MDS to work the operations support squadron training office. The chief of the training section and the NCOIC will be instructor qualified. Assign additional aircrew members as required.

1.3.7.2. Develop programs to meet training objectives. Provide necessary staff support and assist subordinate units in management of training programs that meet unit needs.

1.3.7.3. Determine annual formal aircrew training quota requirements, submit quota requests to MAJCOM, AFSOC/A3T and NGB/A3O, and manage quotas allocated.

1.3.7.4. Ensure subordinate unit training offices are trained in regulations, procedures, and other facets of job performance.

1.3.7.5. Ensure RTM guidance implementation to include ARMS training profile updates and squadron dissemination.

1.3.7.6. Ensure squadron's establish annual training plans, conduct quarterly training review boards, and identify crew members for upgrade.

1.3.7.6.1. Ensure group Stan/Eval trend data and instructor feedback are reviewed at a group-wide level on a semiannual basis. Pertinent information from review will be disseminated to the individual squadrons for incorporation into squadron training plan. Example: applicable MC-130P NVG takeoff and landing trends relayed to EC-130J.

1.3.8. Flying Squadron Commander Responsibilities. For the purpose of this instruction, the 193 SOS/DO may assume 193 SOS/CC responsibilities and authority in the event of 193 SOS/CC unavailability. (T-3)

1.3.8.1. By letter of appointment, should assign a minimum of one officer and one NCO aircrew member to work the unit training office. The chief of the training section and the NCOIC should be instructor qualified. Additional aircrew members will be assigned as required.

1.3.8.2. Ensure RTM guidance implementation to include ARMS training profile updates. Ensure aircrew members complete in unit ground, mission, and continuation training programs.

1.3.8.3. Ensure adequate training continuity and supervision of assigned and attached aircrew members. Assign additional requirements based on individual aircrew members experience and proficiency as necessary.

1.3.8.4. Review training and evaluation records of newly assigned or attached aircrew members and those completing formal training to determine the necessary training required to complete/certify the individual as Basic Aircraft Qualified (BAQ), Basic Mission Capable (BMC), or Mission Ready (MR).

1.3.8.5. Before each semiannual training period, assign Flying Training Levels (FTLs), and levels of qualification (evaluator, instructor, etc.) to assigned and attached aircrew members (see Chapter 4 for description of training levels). Assign training levels based on experience and aircraft proficiency.

1.3.8.6. Establish annual squadron training plan. Any flying training that doesn't support MAJCOM METs, unit METs, or formal school training should be questioned and reviewed.

1.3.8.6.1. Conduct quarterly training review boards to monitor training, correct deficiencies, and identify crew members for upgrade.

1.3.8.6.2. Ensure Stan/Eval trend analysis data and instructor feedback are collected, analyzed, and incorporated into the squadron training plan.

1.3.8.7. Ensure supervisors and graduates complete the formal school post-graduate questionnaires, if applicable. The formal school sends out a notification message to the graduate and his commander approximately 90 days after the student graduates. To assign a unit POC for tracking questionnaires or to gain access to the system, contact the administration office at the formal school.

1.3.8.8. Review qualifications and monitor training requirements for unit assigned flight surgeons.

1.3.8.9. Supplement this instruction (as required) and forward unit supplement to MAJCOM, AFSOC/A3T and NGB/A3O for approval.

1.3.8.10. Submit squadron projected formal school flight training requirements annually to NGB through 193 SOW/DPMT and information copy to MAJCOM/A3T.

1.3.8.11. Must maintain mission ready status.

1.3.9. OSF/DOT Responsibilities. (T-3)

1.3.9.1. Manage unit training programs to ensure compliance with this instruction and applicable Air Force guidance on the training of aircrew members.

1.3.9.2. Submit waivers IAW paragraph 1.6. and maintain a waiver tracking log.

1.3.9.3. Monitor status of unit training. Ensure flight commanders or designated representatives monitor the quality of training being accomplished and identify training deficiencies to the training office. Report deviations and document significant trends affecting unit or individual training status to unit commanders and operations officers.

1.3.9.4. Schedule and conduct required or directed training to ensure all aircrew members receive applicable ground training during eligibility periods.

1.3.9.5. Conduct annual training reviews for all aircrew members. Coordinate with unit commander to ensure FTL appointment letter is updated semiannually.

1.3.9.6. Submit all unit-developed training programs to NGB/A3O for review and approval, courtesy copy AFSOC/A3T.

1.3.9.7. Maintain training continuity book detailing training office management. Maintain a copy of the unit training Officer/NCO appointment letter in the continuity book and forward a copy to MAJCOM, AFSOC/A3T.

1.3.9.8. Maintain and update unit training office self-inspection checklist. Conduct self-inspection IAW wing/group self-inspection program. A copy of the last two self-inspections and open discrepancy tracking sheets will be maintained in the unit training continuity book.

1.3.9.9. Track continuation training and notify individuals when currency is lost. Notify unit operations officers and commanders on issues affecting readiness.

1.3.9.10. Maintain training material and equipment for recurring ground training events. Periodically review ground training materials, tests, and computer based instruction for currency (not required when maintained by Wing/Group/OSS).

1.3.10. Instructor Responsibilities: (T-3)

1.3.10.1. Be thoroughly familiar with all courseware and contents of the applicable attachments to this instruction for qualification, upgrade, and specialized training they are required to administer.

1.3.10.2. Review the student's training records prior to performing each flight or training session.

1.3.10.3. Conduct thorough preflight briefing and postflight critique.

1.3.10.4. Ensure all required upgrade training items are completed and signed off only after the student demonstrates consistently the required level of knowledge and proficiency. Complete and sign off all required training items prior to recommending the student for an evaluation or certifying the student in a maneuver or procedure.

1.3.10.5. Each instructor aircrew member is responsible for the safe execution of the duties of their respective crew position. At any time during the flight, if the judgment or proficiency of the student should raise a question in the instructor's mind as to the student's ability to safely execute the duties of the aircrew position, the instructor will immediately take over these duties. The instructor should then explain and demonstrate the proper method of executing these duties. Instructors must be highly knowledgeable in EC-130J TTP and governing AFIs to provide immediate instruction to any crew position concerning weapon system employment and regulatory and non-regulatory guidance.

1.3.10.6. Instructor pilots are responsible at all times for the conduct of the flight and safety of the aircraft. At any time during the flight, if the judgment or proficiency of the student at the controls raises a question in the instructor pilot's mind as to the student's ability to safely complete a prescribed maneuver, the instructor pilot will immediately take over the controls of the aircraft. The instructor pilot should then explain and demonstrate proper methods of conducting the maneuver prior to the student resuming control of the aircraft. All instructors will place special emphasis on the procedures for positive identification of emergency conditions before initiating corrective action. In addition, instructors will place a high emphasis on the procedures for positive exchange of control; these procedures will be thoroughly briefed.

1.3.10.7. Instructors who demonstrate deficiencies in their ability to instruct may be used in their primary crew position (provided the deficiency does not involve primary crew duties). Commanders will take the necessary action to either retrain or remove those individuals from instructor status IAW AFI 11-202, Vol 1 and 2 AFSOC Sups. (T-2)

1.3.10.8. Individuals designated for instructor duty are authorized to instruct at all levels of qualification. Instructors are authorized to teach any event in which they are qualified and current unless specifically restricted.

1.3.11. Individual Aircrew Member Responsibilities. (T-3)

1.3.11.1. Upon PCS, hand carry career training folder and any other available training records to assist the gaining unit in assessing qualifications and training requirements.

1.3.11.2. When attending a formal school course, hand carry a copy of ARMS Individual Data Summary, flying history report, individual training summary, aeronautical orders,

aviation service worksheet, and any additional requirements set forth in the ETCA to the training squadron aviation resource management office.

1.3.11.3. Complete training requirements and currencies within the guidelines of this instruction.

1.3.11.4. Participate only in ground and flying activities for which they are qualified, current, and adequately prepared.

1.4. Aircrew Training Policy. The primary training method for EC-130J initial qualification, requalification, or upgrade training is attendance at an ETCA formal school. USAF policy dictates the use of formal schools unless attendance is impractical. The secondary method is in-unit training using applicable formal school courseware. (T-2) Secondary method training (SMT) requires a waiver be submitted through appropriate channels per this instruction and approved by NGB/A3O, courtesy copy HQ AFSOC/A3T. (T-2) (**Note:** Formal schools will not forward written examinations as part of the courseware for in-unit qualification training.) (T-2) Any aircrew member who was previously dis-enrolled from a formal ETCA course for substandard performance is ineligible for a secondary method training waiver. (T-2) 193 FTU is the primary source for formal training products. (T-3) When specific formal courseware is not published, use of locally developed training syllabi can be authorized. (T-3) Units will forward all locally developed syllabi for in-unit training to NGB/A3O for review and approval. (T-3) All locally approved in-unit SOIs are posted on the 193 Tactics and Training CoP. (T-3)

1.4.1.1. Formal School Courseware Requests. For SMT, the waiver authority (per [Table 1.1](#) of this instruction) will include the appropriate formal school as an addressee on all correspondence and will request that the formal school forward applicable courseware to the 193 FTU. (T-2) Courseware includes but is not limited to; the course syllabus, briefings, Computer Based Training (CBT) modules, student and instructor guides, and training guides and grade sheets for the student's training folder. (T-2) The FTU will verify the current version is used. (T-3)

1.4.1.2. Complete all academic, ground, and flight training outlined in the courseware. When the courseware is adapted for local use, modify it only if the training is incompatible with local training conditions; i.e., no simulators. (T-3)

1.4.1.3. NGB/A3O approved differences training may be conducted in unit without a waiver.

1.4.1.4. Units conducting training where a waiver is not required (i.e., complete training for restricted AF Form 8, *Certificate of Aircrew Qualification*, or NGB/A3O approved differences training) will send a request for any applicable courseware through channels to NGB/A3O, with an information copy to the appropriate formal school. (T-2) Include unit point of contact (name, rank, office symbol, and telephone number) and the name and rank of the individual who will receive the training. (T-2)

1.4.2. Training Forms. Aircrew training records and forms will be established and maintained per Chapter 6 of this instruction. (T-2)

1.4.2.1. AF Form 4348, *USAF Certification of Aircrew Training*. Used to document ground/flying training associated with mission qualification, and to document instructor certified and one-time/initial flying training events. The AF Form 4348 is maintained in the individual's Flight Evaluation Folder (FEF) per AFI 11-202, Vol. 2, *Aircrew Standardization/Evaluation Program*.

1.4.2.2. The following forms aid management of aircrew training programs.

1.4.2.2.1. AF Form 4109, *SOF/CSAR Training Record*. Used as the training record jacket to document in-unit qualification or upgrade of an aircrew member. It documents applicable ground training, special function training, part task training, cockpit procedures training, simulator training, and flying training accomplished by aircrew members.

1.4.2.2.2. AF Form 4110, *Comments – SOF/CSAR Training Record*. Used to document narrative comments on aircrew training activities.

1.4.2.2.3. AF Form 4111, *SOF/CSAR Training Record*. Used to list required proficiency levels (RPL), indicate events for training sortie completion, and to document demonstrated student task and subtask performance and knowledge proficiency levels. Units are authorized to overprint and reproduce AF Form 4111 for approved course syllabi. The number of training tasks in the appropriate training guide is a recommended minimum, which normally allows the student to achieve proficiency. It is neither intended to restrict the number of times the task must be accomplished nor restrict proficiency advancement.

1.4.2.3. IAW the Career Field Education and Training Plan (CFETP), personnel in AFSC 1AXXX are exempt from maintaining OJT Training Folders (AF Form 623).

1.4.2.4. For Weapons Instructor Course (WIC), prepare training records IAW USAFWS guidance.

1.4.3. Aircrew Training While DNIF. Aircrew members whose status is “duty not involving flying” (DNIF) may log ground training events, including simulator training, if the member's physical condition allows. Consult the flight surgeon initiating AF Form 1042, *Medical Recommendation for Flying or Special Operational Duty*, action if the DNIF status includes ground training limitations.

1.4.4. In-flight Supervision. Unless specifically directed, the unit commander determines the level of supervision necessary to accomplish required training. If the mission objectives include introduction to tasks or instruction to correct previous discrepancies, then an instructor may be required. The following personnel must be supervised by an instructor from a like crew position when performing aircrew duties. (T-1)

1.4.4.1. Non-current aircrew members.

1.4.4.2. Aircrew members in initial, difference, upgrade, or requalification flying training.

1.4.4.3. Senior officers who have not completed initial qualification as outlined in Chapter 2 and as outlined in paragraph 1.7.

1.4.5. Cross Crew Position Training (CCPT). With unit commander, operations officer, or mission commander approval, instructors from one crew position may train crewmembers from a different crew position on events in which both are qualified (as long as the instructor is not performing duties as a primary crewmember at the time) unless otherwise restricted in this volume. (T-3) Flight evaluations must comply with requirements of AFI 11-2EC-130J, Vol 2, *Aircrew Evaluation Criteria*.

1.5. Service Commitments. Formal training, either primary or secondary method, conducted per this instruction may incur a service commitment IAW AFI 36-2107, *Active Duty Service Commitments (ADSC)* or ANGI 36-2301, *Professional Military Education*. Reference the appropriate AFI for program specifics. Individuals will acknowledge the incurred SC by signing the appropriate **Service Commitment Acknowledgement Statement**, prior to entering training. The FTU will notify AFPC/DPSFO via the servicing MPF once training is complete. (T-3)

1.6. Waivers: Unless otherwise specified AF/A3O-A is the waiver authority for this instruction. EXCEPTION: MAJCOM/A3 or NGB/A3O is the waiver authority for individual aircrew requirements, but may not approve blanket or group (two or more aircrew) waivers. For case-by-case individual waivers for flight physical and physiological training currencies, AFSOC/SGP and AFMSA/SG3P are the respective waiver authorities. Some ground training items (e.g. small arms training, LOAC, etc.) are tasked by other agencies. Reference the source instruction to determine the waiver authority in these cases. Waiver authority for supplemental guidance will be specified in the supplement and approved through higher level coordination authority.

Table 1.1. Processing of Waiver Requests.

Waiver requested by:	Waiver Authority	Forward request through:	Reply sent to:	Info copy sent to:
Any unit (for items required by AFI 11-202 V1)	HQ USAF/A3O AFMOA/SGPA HQ USAF/SGO (T-1)	Group/DOT (OGV for AFRC) to NAF/A3 (if applicable) to MAJCOM/A3T to MAJCOM/A3	Group/DOT (Group/OGV for AFRC)	See below
Active Component unit	HQ AFSOC/A3T (T-2)	Group/DOT to HQ AFSOC/A3T	Group/DOT	Requesting unit
AETC Formal School or AETC Unit	HQ AETC/A3F (T-2)	Group/DOT to HQ 19 AF/A3FS to HQ AETC/A3F	Group/DOT	AETC Formal School, HQ AFSOC/A3T, HQ 19 AF/A3FS

1.6.1. Waivers to the requirements of this instruction will be submitted via message, memo, fax, or email through the training office to the OG/CC, and then to the NAF/A3T or MAJCOM/A3T (as applicable) for approval, unless otherwise specified. (T-2) Group commanders are the delegated waiver authority for flying hour requirements and for ground and flying training requirements as outlined below in **paragraph 1.6.4**, and **1.6.5** of this instruction. (T-3) Groups will keep an accurate record of all waivers granted and notify MAJCOM/A3T, as appropriate, by message when such waivers or extensions are issued. (T-3)

1.6.1.1. Units will maintain waiver logs for 1 year. As a minimum, track the following information: (T-2)

1.6.1.1.1. Waiver type.

1.6.1.1.2. Approval authority.

1.6.1.1.3. Approval date.

1.6.1.1.4. Waiver number.

1.6.1.1.5. Waiver expiration date.

1.6.1.1.6. Copy of the signed waiver.

1.6.2. General Waiver Format. Name, grade, flying organization (assigned or attached), present crew position (including special mission qualifications), total flying time and primary aircraft assigned (PAA) time (including instructor and evaluator time, if applicable) and justification, crew qualification to which member is qualifying or upgrading, scheduled training start date, expected upgrade or qualification date, date last event accomplished, remarks, and requesting unit point of contact (include name, rank, telephone number, and office symbol). Waiver format templates are available on the AFSOC/A3T website, https://www.afsoc.af.mil/milonly/a3t/A3T_home.htm, or training Community of Practice (CoP), <https://afkm.wpafb.af.mil/ASPs/CoP/OpenCoP.asp?Filter=OO-OP-SO-12>

1.6.3. Units requesting waivers for SMT in-unit qualification, mission qualification, or upgrade of an aircrew member will send requests through appropriate channels to NGB/A3O. Formal schools will forward current copies of courseware materials to units semi-annually. Maintain copies of all waivers in the individual's training folder. If the training incurs an ADSC per **paragraph 1.5**, include the statement "Individual acknowledged receipt of ADSC by signing the AF Form 63 on <date AF Form 63 signed>." (T-2)

1.6.4. Operations Group commander or equivalent (e.g. CJSOAC/CC) may:

1.6.4.1. Waive 10% of the total and PAA hours required for upgrade in all crew positions, on an individual basis only. A copy of the waiver must be filed in the individual's training record. Students attending formal school will bring a waiver letter to the formal school for insertion into their training record. (T-3)

1.6.4.2. Extend ground training requirement due dates up to 2 months for **Table 4.3 Exception**: Items referenced in paragraph 1.6. levied by other AFIs may not be waived by the OG unless specifically authorized to do so in the source AFI. These events may

count towards the next periodic requirements (units should note on waiver when events were accomplished and the ARMS due date should be updated).

1.6.4.3. Extend due dates for the duration of an exercise, contingency or operational mission for **Table 4.3.** events on an individual basis only if a aircrew member goes overdue while away from home station and the training is not available at the deployed location. **Exception:** Items referenced in paragraph 1.6. levied by other AFIs may not be waived by the OG unless specifically authorized to do so in the source AFI.

1.6.4.4. Waive all flying training requirements (refer to current RTM) except as otherwise noted) on an individual basis only. Wings/groups must keep an accurate record of waivers granted. Notify NGB/A3O and HQ AFSOC/A3T when waivers are issued. (T-2)

1.6.5. Unit commanders may carry new crewmembers as “mission ready” (MR) for up to 6 months if an aircrew member arrives at the unit after a PCS or formal school and is not MR in all core mission events. Units must notify HQ AFSOC/A3T and NGB/A3O of any OG extensions. (T-2) Under no circumstance will aircrew perform events in which they are not qualified unless under the direct supervision of an instructor. This policy does not apply to basic aircraft qualification events. If training is not complete in 6 months, the aircrew member becomes “non-mission ready” (NMR). Squadrons will have 6 months from the time a new core mission event is added and MAJCOM guidance issued to train and qualify aircrew in the new event. (T-2)

1.7. Senior Officer Flying/Supervisory Aircrew. See AFI 11-202, Vol. 1, AFSOC Sup.

1.8. Intra-command and Inter-command Transfer of Aircrews. For intra-command transfer of aircrew members, the gaining organization will honor validated training completed by newly assigned crewmembers prior to the transfer. (T-3) For inter-command transfer, certifications and qualifications should be accepted to the maximum extent practical, as long as training and evaluation standards are equivalent. The operations officer at the gaining unit should review the individual's career training folder and flight evaluation folder to determine which certifications and qualifications will be honored. (T-3) Aircrew members qualified in the same MDS are considered qualified in that equipment throughout the force when used for the same mission.

1.8.1. Permanent Change of Station (PCS) Screening. Losing units will screen individual flight and ground training records during unit out-processing. (T-2) Accomplish this screening in sufficient time to correct discrepancies prior to PCS. Losing unit will provide a printed copy of current ground and flying training summaries to individuals prior to PCS. (T-3) See AFI 11401, *Aviation Management*, for additional guidance.

1.8.2. Instructor training and qualifications may be accepted at the discretion of the gaining unit commander.

1.9. Initial Cadre for Change of Aircraft, Equipment, or Capability. When possible, qualified personnel in other units operating like equipment will provide the initial cadre. In some instances, it will be necessary for units converting from one design aircraft to another to form an initial cadre of aircrew personnel for whom certain training

qualification requirements may be waived. Authorization to form initial cadre crews will be contained in the conversion program action directive. (T-2) Unless otherwise stated in the program action directive, the following conditions will apply to management of initial cadre aircrew qualification for aircraft conversion: (T-2)

1.9.1. A nucleus of instructor and flight examiner personnel (initial cadre) will be formed to begin aircrew training. (T-2) Initial cadre will not be designated in a crew position higher than currently held; for example, EC-130E IP to EC-130J flight examiner. See AFI 11-202 Vol 2, initial instructor evaluation, for evaluation requirements.

1.9.2. Units send proposed initial cadre list by name, rank, current crew position and aircraft, total flying time, and requested crew qualification level through channels to AFSOC/A3 and NGB/A3O for approval. (T-2)

1.9.2.1. Following final approval, publish a squadron letter to identify initial cadre instructors and flight examiners by aircraft and crew qualification and file in each cadre individual's FEF. (T-2)

1.9.2.2. If a check ride was accomplished, enter appropriate comments in the remarks section of AF Form 8 explaining the individual's status as initial cadre instructor or flight examiner. (T-2)

1.9.3. Initial cadre is not required for minor aircraft modifications when any required training for that modification is provided by the contractor and/or can easily be accomplished in-unit. Conduct differences training for the new equipment and log training on the letter of Xs or Memo for Record (MFR). (T-2) Aircrew members will not fly with new equipment until trained. (T-2)

1.10. Unit Aircrew Capability. Squadrons will maintain MR status on all primary aircrew members up to unit authorizations. Commanders will train aircrews to meet capabilities specified in unit Deigned Operational Capability (DOC) statements. (T-3) Supervisory aircrew and staff members assigned above squadron level, which are in excess of the unit's mission requirements, will maintain MR, basic mission capable (BMC), or basic aircraft qualification status, as required. (T-3) **Note:** To change from BMC to MR status, a crewmember will begin maintaining full MR flying currency. The unit commander may assign additional training, as desired.

1.10.1. Commanders will not assign additional duties to first assignment "pipeline" (directly out of formal MDS training) crewmembers (officer and enlisted) for their first 6 months in the unit. (T-3) First assignment crewmembers in any AFSOC weapon system should not be given an additional duty for the first 6 months in the unit. This policy allows pipeline students to learn the weapon system without distraction of an additional duty; however, first assignment senior personnel may be assigned additional duties.

1.10.2. Aircrew members will not perform long term duties which detract from the primary duties of training for, or performing the unit flying mission. (T-3)

1.10.3. ACC Currency Requirements. Permanent Party aircrew assigned to the 34 WPS USAFWS as instructors must maintain at least BMC flying currency in the

portions of the mission they will instruct. Unit commanders may direct specific individuals to maintain only partial BMC qualifications. In such cases, the crewmember will require only those currency items associated with this tailored qualification. The individual's AF Form 8 will indicate applicable restrictions based on assignments of less than full mission qualification. If 34 WPS crewmembers augment operational units, the gaining unit commander must be provided a detailed list of the individual's current training status. The individual must comply with MR training requirements of the gaining unit or pursue applicable waivers through the operational unit's MAJCOM/A3. The gaining unit or MAJCOM may levy additional requirements as desired. Chapter 4, of this instruction, outlines exceptions to continuation currency training requirements for these personnel. **Note:** For the purposes of this instruction, enlisted aircrew members assigned to the 34 WPS are not considered USAFWS instructors. (T-2)

1.11. Changes. Recommendations for improvement to this instruction are encouraged. Send recommendations to 193 OSF/OST, on an AF Form 847, *Recommendation for Change of Publication*. 193 OSF/OST will coordinate all changes through 193 OG/OGV and HQ AFSOC/A3T. (T-3) AF/A3 is the approval authority for interim changes to this instruction.

1.11.1. AFSOC/A3 and NGB/A3 will determine training requirements for subordinate units. AFI changes will be issued via revision, Interim Change (IC), or Administrative Change (AC) to this publication. Due to dynamic requirements of Combatant Commanders, training requirements and currencies may be altered regularly. These training requirement and currency adjustments may be made via RAP (Ready Aircrew Program) Tasking Memorandum. AFSOC/A3 will be an info addressee on all changes.

1.12. Deviations. This instruction does not authorize deviations from the flight manual or any other Air Force Instruction. Flight safety will be given prime consideration and must take precedence over the requirements and guidance of this instruction. (T-2)

1.13. Publication Administration. This instruction is distributed to ACC, AETC, AFRC, AFSOC, ANG, AFSOC-gained units, and AFSOC related schools based on requirements established through the Publications Distribution Office (PDO). All aircrew members are authorized this instruction. Distribution to units, organizations, and individuals outside these commands or not associated with the MDS may be made upon specific request and justification.

1.13.1. Supplements. Forward all unit or MAJCOM supplements to this instruction to HQ AFSOC/A3TA, who in turn will forward to HAF/A3OI for approval. (T-2) Provide HQ AFSOC/A3TA, and applicable MAJCOM a copy of all approved supplements. (T-3) If required by mission or location, units may supplement this instruction by coordinating with HQ AFSOC/A3T before publication.

Chapter 2

QUALIFICATION TRAINING

2.1. Overview. This chapter outlines the minimum requirements for Basic Aircraft Qualification (BAQ) training which may be completed via initial qualification, requalification, conversion, or differences training. Duties not directly related to qualification or requalification training should be minimized.

2.1.1. Qualification training provides the training necessary to initially qualify aircrew members in a basic crew position and flying duties without regard to the unit's mission. Upon completion of qualification training, the aircrew member attains BAQ status. BAQ is a prerequisite for Mission Qualification Training (outlined in Chapter 3).

2.2. General Requirements. The primary method of initial qualification and requalification training is the appropriate formal training course listed in the ETCA. If no requalification course exists, conduct requalification using the initial qualification course. Completing the appropriate formal course satisfies the training requirements of this chapter. When attendance is not practical or quotas are not available, units may request secondary method in-unit qualification training waivers IAW paragraph 1.4.1. Any aircrew member who has previously failed to successfully complete the ETCA formal course for substandard performance will not be issued a secondary method training waiver.

2.3. Training Prerequisites. Course prerequisites are IAW the appropriate formal course syllabus, the ETCA, AFI 11-202, Vol. 1, and this instruction. The formal school SOI designates the course prerequisite approval authority.

2.4. Ground Training Requirements. Complete all required ground training IAW AFI 11 202, Vol. 1, and applicable RTM prior to certifying individuals as MR. Completion of training will establish due dates for recurring ground training. (T-2) All crewmembers must complete crew resource management, aircrew flight equipment familiarization, emergency egress, flight physical, physiological, local area survival, and emergency parachute training, prior to the first flight, as well as a flight physical. (T-2)

Table 2.1. DELETE.

2.4.1. Written Examination. Open and closed book qualification examinations must be completed before the completion of basic qualification flying training. Written examinations must satisfy the requirements of AFI 11-202, Vol 2 and MDS Volume 2. The formal school will not forward their examinations as part of the courseware for in-unit qualifications. When qualification training is completed by secondary method, the student will complete the appropriate group stan/eval or equivalent examination. (T-2)

2.4.2. DELETE.

2.4.2.1. DELETE.

2.5. Flying Training Requirements. Satisfactorily completing the appropriate ETCA formal course satisfies the requirements of this section. Approved in-unit qualification

training must be accomplished IAW applicable formal school courseware and the guidance below: (T-2)

2.5.1. Flying training lessons should be completed sequentially. If mission scheduling or student progress dictates otherwise, in-unit training sequences may be changed by the unit Operations Officer.

2.5.2. Aircrew member upgrade and special qualification training requirements may be completed on training or operational missions under the supervision of an instructor in the same aircrew position. Comply with restrictions in AFI 11-2EC-130J, Vol. 3.

2.6. Basic Aircraft Qualification Conversion/Differences Training. Conversion training is normally associated with training between MDS (e.g. C-21 to C-130). Difference training is conducted when training in a different series aircraft in the same mission design (e.g. C-130E to C-130H3). Use difference training when changing between same design aircraft and the amount of training needed for qualification does not warrant attendance at a formal qualification course. (T-2) Additionally, accomplish difference training when an aircraft is modified and any required training for that modification can easily be accomplished in-unit. (T-3) BAQ difference training qualifies an aircrew member to be a basic aircrew member. Primary method for differences training is via completion of a formal school transition course (TX). If a TX course is not available, the alternate method is via in unit ground and flight training IAW MAJCOM/A3T approved AF Form 4111, satisfactory completion of the qualification written open/closed examinations, and instructor certification on the AF Form 4348 for the new aircraft. Aircrew members entered into differences training will complete training within 180 days (12 months for AFRC and ANG) after the first flight of the training program. (T-2) BAQ Differences training is authorized per **Table 2.2**.

2.6.1. For basic aircraft instrument/qualification purposes, the EC-130J, C-130J, MC-130J and C-130J-30 are considered to be the same mission design. Training between the C-130J variants and any other C-130 variant is conversion training and will be accomplished via a formal course at an FTU or via SMT. (T-2)

2.6.2. Upon completion of differences training and certification on the AF Form 4348, the aircrew member is Basic Aircraft Qualified (BAQ) in the new aircraft. Aircrew members may maintain previous C-130 instructor/evaluator, air-to-air refueling (AAR) and Maximum Effort qualifications at the discretion of the unit commander. Other crew position qualifications (i.e. mission instructor) are attained through the procedures in **Chapter 5**.

2.6.3. Aircrew members training to an MDS, not specifically listed in **paragraph 2.6** or **Table 2.2** must complete conversion training. Conversion training requires the completion of the formal school initial qualification course. (T-2)

2.6.4. Multiple Qualification. Aircrew members will attend a formal initial qualification or TX course to gain basic aircraft qualification in another MDS unless authorized difference training per **paragraph 2.6**. (T-2) For approved secondary method training, request courseware IAW **paragraph 1.4**.

Table 2.2. Basic Aircraft Qualification Differences Training.

I	A	B	C	D	E
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T E M	For Aircrew Qualified In	Difference Training Authorized by Crew Position			
		C-130J	AC-130J	HC/MC-130J	EC-130J
1	C-130J	N/A	PL	PL	PL
2	AC-130J	PL	N/A	PCL	PCL
3	HC/MC-130J	PL	PCL	N/A	PCL
4	EC-130J	PL	PCL	PCL	N/A
NOTES: 1. Refer to appropriate AFI 11-2MDS-series, Volume 1. LEGEND: P-Pilot, C-CSOs, L-Loadmaster					

Chapter 3

MISSION QUALIFICATION TRAINING (MQT)

3.1. Overview. This chapter establishes the minimum training requirements for completing mission qualification and requalification. Aircrew members completing mission qualification or requalification will meet the requirements of this chapter. Upon completion of mission qualification training, the aircrew member will be assigned either Basic Mission Capable (BMC) or Mission Ready (MR) status.

3.2. General Requirements. The primary method of mission qualification is to complete the appropriate formal training course listed in the ETCA. When attendance is not practical or quotas are not available, units may request waivers to conduct secondary method mission qualification training using formal school courseware. The secondary method requires use of formal school courseware and a waiver from the appropriate waiver authority as listed in [Table 1.1](#). This courseware establishes the minimum training requirements to meet standards specified in AFI 11-2EC-130J, Vol. 2. Units may supplement courseware to meet local requirements. Submit all courseware change requests to NGB/A3O prior to implementation.

3.3. Training Prerequisites. Course prerequisites are IAW the appropriate formal course syllabus, the ETCA, AFI 11-202, Vol. 1, and this instruction. The formal school SOI designates the course prerequisite approval authority.

3.3.1. This does not preclude simultaneous basic qualification and mission qualification training. Simultaneous/Concurrent Multiple-MDS qualification upgrades will not be accomplished.

3.3.2. If there is not a separate mission requalification course, aircrew members requalifying in the units mission will comply with the initial mission qualification course prerequisites. (T-2)

3.3.3. For the minimum requirements to be trained as a Mission Pilot (MP) refer to [Table 5.1](#). If the requirements of the table are not met, train and evaluate the individual as a MC unless excepted below.

3.3.3.1. Prior Qualified Pilots (PQP, e.g. FAIP, OSA, etc.) with at least 800 hours total flying time will be trained in the left seat and evaluated as a MP. PQP pilots trained as an MP with less than the required C-130 experience will fly in-unit as an MP until they have the required PMAI flight time. Units will follow Requalification procedures in Chapter 4 to requal those pilots as MPs.

3.3.3.2. Prior Qualified Pilots (PQP, e.g. FAIP, OSA, etc.) with less than 800 hours total flying time will be trained and evaluated as an MC.

3.4. Ground Training Requirements. Complete all ground training required per the RTM as part of mission qualification training or prior to certifying individuals as mission ready. Completion of training will establish due dates for recurring ground training required. Credit any training accomplished at a formal school. Qualified mission ready aircrew members transferred from other units require only unit specific mission ready training events or events which are due/overdue.

3.4.1. Academic Training. Complete all academic and ground training delineated in applicable courseware. If not included in the course syllabus, accomplish the minimum requirements listed in AFI 11-202, Vol 1, separately.

3.4.2. Written Examination. Crewmembers must complete a written examination before the end of mission qualification flying training. (T-2) Formal school End of Course examinations, Group Stan/Eval or equivalent examinations for SMT satisfy this requirement. The formal school will not forward their examinations as part of the courseware for inunit qualifications.

3.4.3. See AFI 11-202, Vol 1, AFSOC Sup for Flight Surgeon (FS), Medical Technician, and Combat Camera Aerial Photographer Training requirements.

Table 3.1. DELETE.

3.5. Flying Training Requirements. Satisfactorily completing the appropriate ETCA formal course satisfies the requirements of this section. Approved in-unit qualification training must be accomplished IAW applicable formal school courseware and the guidance below: (T-2)

3.5.1. Flying training lessons should be completed sequentially. If mission scheduling or student progress dictates otherwise, in-unit training sequences may be changed by the unit operations officer.

3.5.2. There should be minimum time lapse between training missions, and every effort should be made to complete mission qualification training requirements within the prescribed time period.

3.5.3. Aircrew member requirements may be completed on training or operational missions under the supervision of an instructor in the same aircrew position. Comply with restrictions in AFI 11-2EC-130J, Vol. 3.

3.6. Specific Mission Training Requirements. It is the unit's intent for the WSO candidate to be dual qualified in both the CSO (Combat Systems Officer) and MCC (Mission Crew Commander) positions; however, this may be altered based on the needs of the unit. CSO training is intended to be completed prior to beginning MCC training to maintain a fluid course control and progression of students. However, a new WSO student can begin the MCC course if it is justified for mission requirements. Also, the unit will determine the need for any changes to the above based upon individual capabilities, instructor availability, or aircraft availability. (T-3) If unit needs dictate, individuals may only be qualified in a single position. The FTU commandant must approve this request prior to beginning the course. (T-3) ECS Operators are normally qualified to operate the HF, MF, NB, WB, and PT positions. However, based on unit needs and individual capabilities, single seat qualifications are at the discretion of the FTU and SQ/CC. (T-3)

3.6.1. Aircrew members qualified and current in special mission events may maintain that qualification, once they are mission qualified in their new aircraft.

Chapter 4

CONTINUATION TRAINING

4.1. General Requirements.

4.1.1. Requirements in this chapter and any applicable RTMs satisfy the minimum flying and related ground training to maintain currency and the assigned training status. Individual proficiency may require a greater number of events. Failure to accomplish these continuation training requirements will not affect BMC or MR status but may entail additional training as determined by the Sq/CC.

4.1.2. Training requirements may be completed on any sortie if the accrediting criteria of this instruction are met. Sorties and events that are compatible may be credited on the same flight.

4.1.3. Aircrew members will not log continuation training requirements in events in which they are unqualified.

4.1.4. Training events accomplished on a evaluation or an instructor certification (that event) may be credited toward the individual's volume requirements.

4.1.5. Flying training events accomplished during formal training will use the course completion date (successful evaluation date) to establish the due dates for all subsequent currency and requirements. Use actual dates for ground training. Certification events trained to a 3C in the FTU will use the date of the checkride as the initial accomplishment date.

4.1.6. Aircraft flying training requirements may be accomplished in a aircrew training device (ATD) as noted in Table 4.4. and Table 4.5.

4.2. Training Levels (TL). The use of experienced based Flight Training Levels (FTLs) and Ground Training Levels (GTLs) allows the squadron commander to prioritize training resources. Aircrew members must meet the minimum criteria established in **paragraph 4.2.1**, and **Table 4.1**, of this instruction, before assignment to the respective training level. (T-3) When these minima are met, awarding a training level is at the sole discretion of the squadron commander. **Note:** The aircrew member's availability to fly should not be a factor in assigning a TL.

4.2.1. FTLs are based on minimum primary aircraft assigned (PAA) time and total time. For basic qualification FTL, PAA time will include any variant of C-130J. (Units with C-130J variant aircraft assigned and who fly continuation training events in those aircraft may include time in those aircraft as PAA).

4.2.1.1. FTL "A"-Highly experienced BAQ and/or MR aircrew members.

4.2.1.2. FTL "B"-Experienced BAQ and/or MR aircrew members.

4.2.1.3. FTL "C"-Inexperienced BAQ and MR aircrew members.

Table 4.1. Minimum FTL Hour Requirements (T-2).

Crew Position	FTL "A"	FTL "B"	FTL "C"
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Crew Position	FTL "A"	FTL "B"	FTL "C"
	PAA/Total Hours	PAA/Total Hours	PAA/Total Hours
Pilot *	500/3000	200/1500	No Minimum
Electronic Warfare Officer Weapon Systems Officer WSO	500/3000	200/1500	No Minimum
Combat Systems Officer CSO	500/3000	200/1500	No Minimum
Mission Crew Commander MCC	500/1500	150/1000	No Minimum
Loadmaster LM	500/3000	200/1500	No Minimum
Electronic Communications Systems Operator ECS	500/1500	300/750	No Minimum
* Note: Pilots upgrading to MP will be placed in FLT C for three semi annual periods and minimum FTL requirements to upgrade to higher FTLs.			

4.2.2. Aircrew members may be assigned different FTLs for basic and mission qualifications and events. For example, an aircraft commander coming from AC-130s might be assigned basic FTL "A", mission FTL "C" with a caveat of FTL "A" for AAR.

4.2.3. Change of FTL. Once a semiannual period begins, personnel will not be moved to a level requiring fewer events until the next semiannual period. However, aircrew members may be moved to a level requiring more events. (T-3)

4.2.3.1. Additional Training. FTLs do not prevent the squadron commander from scheduling an aircrew member for additional training.

4.2.4. GTLs are based upon operational flying experience.

4.2.4.1. GTL "1" – Aircrew members with 5 years or greater of operational flying.

4.2.4.2. GTL "2" – Aircrew members with less than 5 years of operational flying.

4.3. Proration of Training Requirements. See AFI 11-202, Vol. 1, AFSOC Sup. Prorate aircrew member flying training requirements for individuals following completion of basic qualification, mission qualification, requalification, and upgrades to a new special mission qualification, or who are not available for flying duties due to PCS, non-flying TDY, DNIF, emergency leave, or other unavoidable circumstances which prevent the individual from flying. Only prorate to zero requirements (No Requirements) for the period of 166 days to 6 months in cases of qualification, requalification, or upgrade. Aircrew members who enter training after the start of the training period may be prorated. Prorate individual requirements based on the number of full calendar months left in the training period. Use [Table 4.2](#) to determine the number of sorties and events required for an individual after proration. (T-2)

Table 4.2. Prorating Training Requirements.

DAYS NOT AVAILABLE DURING PERIOD		SEMIANNUAL PERIOD MONTHS REMAINING						QUARTERLY PERIOD MONTHS REMAINING				
16-45 Days		5						2				
46-75 Days		4						1				
76-105 Days		3						1				
106-135 Days		2						N/A				
136-165 Days		1						N/A				
166-183 Days		No requirements (para 4.3.3.)						N/A				
MONTHS REMAINING		NUMBER OF EVENTS REQUIRED SEMIANNUALLY										
		24	18	16	12	10	8	6	4	3	2	1
S/A	QTR	REMAINING REQUIREMENTS FOR SEMIANNUAL/QUARTERLY PERIOD										
6	3	24	18	16	12	10	8	6	4	3	2	1
5	-	20	15	13	10	8	7	5	3	3	2	1
4	2	16	12	11	8	7	5	4	3	2	1	1
3	-	12	9	8	6	5	4	3	2	2	1	1
2	1	8	6	5	4	3	3	2	1	1	1	1
1	-	4	3	3	2	2	1	1	1	1	1	1

4.4. Recurrency and Requalification Training. Training is required whenever an aircrew member does not meet a currency requirement in this instruction. (T-2) An aircrew member will not perform events unsupervised until training has been accomplished. (T-2) Aircrew members requiring requalification will accomplish training IAW AFI 11-202, Vol. 1, applicable AFSOC or NGB supplements, and **Chapters 2, 3, and 5.**

4.4.1. Recurrency training is the training an aircrew member must accomplish, under the supervision of an instructor, when currency has been lost. The event resulting in recurrency and each event thereafter are creditable for the current training period. Requalification training is the training conducted, under the supervision of an instructor, when an aircrew member is unqualified.

4.4.2. Basic Currency/Requalification. Failure to accomplish a basic currency item that is required periodically (as outlined in the RTM) or failure to complete the semi-annual requirements of the RTM results in the loss of basic currency. Basic recurrency/requalification training requirements are shown below. Individual proficiency will dictate the number of events to be flown with an instructor or flight examiner to satisfy sortie delinquency (as a minimum, one sortie will be flown). (T-3)

4.4.3. Loss of Currency. Failure to accomplish events listed in continuation training as outlined in RTM results in a loss of currency for that event. Aircrew members are non-current the day after event currency expires.

4.4.3.1. Loss of currency events as outlined in the RTM results in loss of basic aircraft currency. These individuals will fly under the supervision of an instructor or flight examiner on all sorties until recurrent. (T-3)

4.4.3.1.1. Aircrew members who maintain qualification in their primary aircraft and a 'slick' C130J variant may satisfy RTM currency requirements in either their primary aircraft or the C130J. If basic semiannual currency is lost (failure to complete the requirements as outlined in the RTM), it is lost for both aircraft. Lost basic or semiannual currency may be regained in either aircraft or the simulator. ECS Operators and MCCs can regain basic or semiannual currency utilizing an Aircrew Training Device (ATD).

4.4.3.1.2. Non-current less than 6 months: Show proficiency in deficient item(s) to an instructor. In addition, pilots will perform a takeoff, approach, and landing. (T-3)

4.4.3.1.3. Loss of currency exceeding 6-months. Aircrew members non-current in designated BAQ events (as noted in the RTM) in excess of six months results in loss of BAQ. Aircrew members non-current in designated RTM mission events in excess of six months results in loss of mission qualification.

4.4.4. Regaining Currency.

4.4.4.1. Only events as noted in the RTM require an evaluation (unqualified) if loss of currency exceeds 6 months (see AFI 11-202, Vol 1). Other events require showing proficiency to an instructor in the aircraft, simulator, or ATD IAW AFI 11-202, Vol 1, to regain currency. If loss of currency exceeds 24 months in other noted RTM events, additional training will consist of ground and flight training as directed by the unit commander (training folder must be opened). (T-3)

4.4.4.2. Aircrew non-current in special mission events which only require an instructor certification (Table 5.4.) may regain currency by showing proficiency in that event to an instructor.

4.4.4.3. Aircrew non-current more than 24 months in special mission events (refer to RTM) requiring an evaluation will complete all initial training and evaluation requirements for that special mission. (T-2)

4.4.5. Requalification Training. Reference AFI 11-202, Vol. 1 as supplemented, to compute the expiration date of qualification and determine the required training to become requalified. Previous instructors in the EC-130J may re-qualify directly to instructor in the EC-130J unless AFI 11-202, Vol 1 as supplemented directs accomplishment of initial qualification training (TX-1).

4.4.5.1. Unqualified up to 39 months at the end of a non-flying assignment or 48 months at the end of any active flying assignment. Crewmembers must complete requalification requirements IAW Chapter 2, of this instruction. Previous instructors in the EC-130J may re-qualify directly to instructor status in the EC-130J. (T-2)

4.4.6. Core Mission Currency/Requalification. Failure to accomplish all events during a semiannual period results in the loss of mission currency or for that mission event only, based on the most current RTM guidance. Mission recurrency/requalification training requirements are shown below. Loss of mission currency or qualification does not affect basic aircraft currency or qualification.

4.4.6.1. Non-current less than 6 months: Show proficiency in deficient item(s) to an instructor.

4.4.6.2. Non-current 6-24 Months (mission unqualified): Mission qualification training as directed by 193 SOS/CC, must include the following: completion of a written mission qualification exam and mission requalification flight evaluation. (T-2) Previous mission qualified instructors may re-qualify directly to instructor status.

4.4.6.3. Non-current 24-60 Months (mission unqualified): Crewmembers must complete mission requalification requirements IAW Chapter 3, of this instruction. Previous mission qualified instructors may re-qualify directly to instructor status. (T-2)

4.4.6.4. Non-current over 60 Months (mission unqualified): Crewmembers must complete initial mission qualification requirements IAW Chapter 3 of this instruction. Previous instructors may not re-qualify directly to instructor status. (T-2)

4.4.7. Special Mission Event Recurrency/Requalification. Special mission event recurrency/requalification training requirements are shown below. For a special mission event, loss of currency/qualification in that special mission event does not affect basic aircraft currency/qualification or mission currency/qualification.

4.4.7.1. Non-current less than six months: Show proficiency in deficient item(s) to an instructor.

4.4.7.2. Non-current greater than six months (unqualified in that special mission): Show proficiency in the deficient item(s) to an instructor, qualified in the appropriate special mission event. Previously qualified instructors may re-qualify directly to instructor status in special mission events, if unqualified for a period less than 60 months.

4.5. Ground Training. The RTM designates ground training requirements for all aircrew members. Crew members will comply with the time periods listed for their FTL/GTL. (T-3) Conduct training IAW the referenced publications, most current RTM, and the guidance below. The governing directive or RTM takes precedence over Chapter 4 requirements. If the AFI 112EC-130J, Vol. 1 is also listed as a governing directive, the most restrictive guidance should be followed.

4.5.1. Failure to Complete Ground Training Events. Make-up training should be accomplished at the earliest opportunity. The following apply when aircrew members exceed due dates for ground training events as noted in the RTM.

4.5.1.1. Grounding items. Aircrew members will not perform flight duties until the grounding item is satisfied.

4.5.1.2. Training status items. Aircrew members will not fly without instructor supervision.

4.5.1.3. Mission Ready (MR) Items. Failure to accomplish the events in **Table 4.3** results in non-mission ready status and the individual will not deploy as a crewmember. However, the OG/CC may waive training requirements IAW **paragraph 1.6.4**, this instruction. Squadrons will document any crewmembers that are deployed while non-current. (T-3)

4.5.2. Block Training. Each group operations training office should establish and administer a centralized aircrew block training session. Block training should include all recurring ground training required to maintain readiness.

4.5.3. Ancillary training. This volume is not a comprehensive list of all ancillary training required by the DoD. Ancillary training parent instructions take precedence over this AFI for those training items. The ETCA website at <https://etca.randolph.af.mil> lists ancillary training courses; each course lists the applicable target group.

Table 4.3. DELETE.

4.5.4. Ground Training Events (Refer to RTM.)

4.5.4.1. DELETE.

4.5.4.1.1. DELETE.

4.5.4.2. DELETE.

4.5.4.3. DELETE.

4.5.4.4. DELETE.

4.5.4.4.1. DELETE.

4.5.4.5. DELETE.

4.5.4.5.1. DELETE.

4.5.4.6. DELETE.

4.5.4.7. DELETE.

4.5.4.8. DELETE.

4.5.5. Mission Ready Training Events (Refer to RTM.)

4.5.5.1. DELETE.

4.5.5.2. DELETE.

4.5.5.3. DELETE.

4.5.5.4. DELETE.

4.5.5.5. DELETE.

4.5.5.6. DELETE.

4.5.5.7. DELETE.

4.5.5.8. DELETE.

4.5.5.8.1. DELETE.

4.5.5.8.2. DELETE.

4.5.5.8.3. DELETE.

4.5.5.9. DELETE.

4.5.5.10. DELETE.

4.5.5.11. DELETE.

4.5.5.12. DELETE.

4.5.5.13. DELETE.

4.5.5.14. DELETE.

4.5.5.15. DELETE.

4.5.5.16. DELETE.

4.5.5.17. DELETE.

4.5.5.18. DELETE.

4.5.5.19. DELETE.

4.5.5.20. DELETE.

4.5.5.21. DELETE.

4.5.5.22. DELETE.

4.5.5.23. DELETE.

4.5.5.24. DELETE.

4.5.6. Training Status Events (Refer to RTM.)

4.5.6.1. DELETE.

4.5.6.1.1. DELETE.

4.5.6.1.2. DELETE.

4.5.6.1.3. DELETE.

4.5.6.1.4. DELETE.

4.5.6.2. DELETE.

4.5.6.3. DELETE.

4.5.6.4. DELETE.

4.5.6.5. DELETE.

4.5.6.6. DELETE.

4.5.6.7. DELETE.

4.5.6.8. DELETE.

4.5.6.9. DELETE.

4.5.6.10. DELETE.

4.5.6.11. DELETE.

4.5.6.12. DELETE.

4.5.6.13. DELETE.

4.5.6.14. DELETE.

4.5.6.14.1. DELETE.

4.5.6.14.2. DELETE.

4.5.6.14.3. DELETE.

4.5.6.14.4. DELETE.

4.5.6.15. DELETE.

4.5.6.16. DELETE.

4.5.6.17. DELETE.

4.5.6.18. DELETE.

4.5.7. Other Training Events (Refer to RTM.)

4.5.7.1. DELETE.

4.5.7.2. DELETE.

4.5.7.3. DELETE.

4.5.7.4. DELETE.

4.5.7.5. DELETE.

4.6. Flying Training.

4.6.1. All aircrew members who maintain BAQ, MR, or BMC must accomplish all applicable training requirements outlined in the RTM based on assigned FTL (A, B, or C). MR and BMC aircrew will also comply with the following:

4.6.1.1. MR aircrew members will also accomplish applicable mission ready requirements from [Table 4.4](#) as designated in the RTM according to their mission qualification and FTL. (T-2)

4.6.1.2. BMC aircrew members will also accomplish at least 50% of the applicable mission requirements as designated in the RTM according to their assigned FTL. (T-2)

4.6.1.3. Flying Training Requirements. Applicable aircrew will comply with the RTM. (T-2)

4.6.1.4. MP qualified Previously Qualified Pilots (PQP) awaiting AC certification may complete Basic Qualification events as outlined in the RTM in either seat.

Emphasis should be on left seat flying. Local Proficiency Sorties will be flown in the left seat. (T-2) MPs may fly in the left seat for airland missions when an aircraft commander who has a minimum of 100 hours since certification occupies the right seat. AFI 11-2EC-130J, Vol. 3, further defines takeoff and landing policy.

4.6.1.5. Instructors may not log events performed by other aircrew members during instruction or evaluations.

Table 4.4. DELETE.

4.7. Basic Aircraft Qualification Event Definitions. Refer to the RTM for event definitions. Failure to accomplish currency or volume requirements results in loss of basic aircraft currency. Flight Surgeons will log currency IAW AFI 11-202, Vol. 1 requirements.

4.7.1. DELETE.

4.7.2. DELETE.

4.7.2.1. DELETE.

4.7.2.2. DELETE.

4.7.2.3. DELETE.

4.7.2.4. DELETE.

4.7.3. DELETE.

4.7.3.1. DELETE.

4.7.3.2. DELETE.

4.7.3.3. DELETE.

4.7.3.4. DELETE.

4.7.3.5. DELETE.

4.7.3.6. DELETE.

4.7.3.7. DELETE.

4.7.3.8. DELETE.

4.7.4. DELETE.

4.7.5. DELETE.

4.7.5.1. DELETE.

Table 4.5. DELETE.

4.8. Mission Event Definitions and Accrediting Criteria. Refer to the RTM. Failure to accomplish them results in loss of event currency as outlined in the RTM. See AFI 11-202, Vol. 1, for complete flight surgeon flying training requirements.

4.8.1. DELETE.

4.8.2. DELETE.

4.8.3. DELETE.

4.8.4. DELETE.

4.8.5. DELETE.

4.8.6. DELETE.

4.8.7. DELETE.

4.8.8. DELETE.

4.8.9. DELETE.

4.8.10. DELETE.

4.8.11. DELETE.

4.8.11.1. DELETE.

4.8.11.2. DELETE.

4.8.11.3. DELETE.

4.8.11.4. DELETE.

4.8.11.5. DELETE.

4.8.11.6. DELETE.

4.8.12. DELETE.

4.8.13. DELETE.

4.8.14. DELETE.

4.8.14.1. DELETE.

4.8.14.2. DELETE.

4.8.14.3. DELETE.

4.8.14.4. DELETE.

4.8.14.5. DELETE.

4.9. Special Mission Event Definitions and Accrediting Criteria.

4.9.1. DELETE.

4.9.2. DELETE.

4.9.2.1. DELETE.

4.9.2.2. DELETE.

4.9.3. **Airdrop.**

4.9.3.1. Pilots may credit selected mission events while performing Pilot Monitoring (PM) duties (refer to RTM.).

4.9.3.2. **Airdrop Proficiency and Currency Requirements.** Pilots may take credit concurrently for an airdrop and other events as defined by event descriptions in the RTM. Loadmasters may take credit when actual load/personnel are loaded and the run-in checklist is complete.

4.9.3.3. **Airdrop (AD) Events.** Log an airdrop event when a successful airdrop is accomplished. Pilots may log actual loads, training bundles or drogue chute only training drops (DOTD). If a no-drop condition occurs after the run-in checklist is completed, aircraft commanders will determine if enough training was accomplished to credit the airdrop for any crew position. (T-3) See event descriptions in the RTM for further guidance. Both pilots may credit the airdrop event. (T-3)

4.9.3.3.1. DELETE.

4.9.3.3.2. DELETE.

4.9.3.3.3. DELETE.

4.9.3.3.4. DELETE.

4.9.3.3.4.1. DELETE.

4.9.3.3.4.2. DELETE.

4.9.3.3.5. DELETE.

4.9.4. **Airland Events.**

4.9.4.1. DELETE.

4.9.4.2. DELETE.

4.9.4.3. DELETE.

4.9.4.4. DELETE.

4.9.4.5. DELETE.

4.9.4.6. DELETE.

4.9.4.7. DELETE.

4.9.4.8. DELETE.

4.9.4.9. DELETE.

4.9.4.10. DELETE.

4.9.4.11. DELETE.

4.10. Multiple Aircraft Qualifications. Refer to AFI 11-202, Vol. 2, AFSOC Sup for crew positions, evaluation requirements, and approval authority for multiple qualifications.

4.10.1. Multiple qualified aircrew members must complete 100% of the Semiannual Basic Aircraft Qualification Training Requirements (refer to both MDS RTMs.) Volume may be completed in either aircraft, but currency must be maintained in each aircraft. (T-2)

4.10.2. Multiple qualified individuals will maintain MR status by completing 50% of the mission requirements for each MDS in which qualification is maintained. Volume may be completed in either aircraft, but currency must be maintained in each aircraft. (T-2)

Chapter 5

UPGRADE/SPECIALIZED TRAINING

5.1. General. This chapter identifies the prerequisites and training requirements for qualified aircrew members upgrading to additional levels of qualification and certification in specialized flight events.

5.2. Aircraft Commander Upgrade (MPA). Commanders will consider experience, knowledge, and judgment when identifying candidates. (T-3) Nominees must have an in-depth knowledge of systems, procedures, and instructions prior to entry into the upgrade program. (T3) The upgrade program is designed to teach AC duties and responsibilities, as well as left seat mission qualification. Once upgraded, the MPA will return to FTL C to gain hours and experience. (T-3) Reference **Table 4.1**.

5.2.1. Aircraft Commander Upgrade Prerequisites. The prerequisite flying time levels for upgrade in **Table 5.1** of this instruction are based on pilots having gained the knowledge and judgment required to effectively accomplish the unit's mission. Flying experience should include left seat time prior to entering formal school upgrade training (Aircraft Commander Preparatory Course). AC candidates will also meet all prerequisites listed in the ETCA and the formal school syllabus. (T-2) To become eligible for the Aircraft Commander Preparatory Course, each MC, in addition to obtaining the minimum hours (recommending a minimum of 500 PMAI) and IP recommendations, will maintain a log of flight experiences (MPA preparatory log) created by the 193 OSF/OST. (T-3) This document will aid in assessing a candidate's ability to accept a higher responsibility as an Aircraft Commander and document exposure to an adequate amount of mission experiences. Instructors and current MPA pilots will document the MC's log during post mission debriefs. (T-3)

Table 5.1. Minimum Hours Required to Upgrade to Aircraft Commander (T-2).

TOTAL HOURS	PMAI HOURS
Over 1,900	200
1,600-1,899	300
1,300-1,599	400
1,000-1,299	800

Notes: All pilots with prior rotary wing time will be trained as MCs unless they have a minimum of 500 hours of fixed wing time (including UPT flying time). For the purpose of this table, PMAI hours is any type C-130 aircraft. Subtract 'Other' flight time in excess of 100 hours

from Total hours. Subtract all 'Other' time from the required PMAI time. Add up to 200 C-130 simulator hours toward Total and PMAI requirements.

5.2.2. Aircraft Commander Upgrade, Ground and Flight Training Requirements. The primary method of AC upgrade is satisfactory completion of the MAJCOM approved formal school course. Fill all available quotas before requesting a secondary method waiver IAW Chapter 1.

5.2.2.1. EC-130J. MCs must have completed the Aircraft Commander Preparatory Course prior to formal aircraft commander upgrade training. (T-3) This in-unit training consists of academic and flight training and is tracked with the aid of the MPA preparatory log. (T-3)

5.3. Instructor Program. A sound and practical aircrew instructor program is a prerequisite for effective training, standardization, and aircraft mishap prevention.

5.3.1. 193 SOS/CC with the aid of Aircrew Review Board members, will personally review each instructor candidate's qualifications. (T-3) Instructor candidates will be selected based on their background, experience, maturity, and ability to instruct. (T-3) The following characteristics must be considered: (T-3)

5.3.1.1. Instructional Ability. An instructor is a teacher and must understand the principles of instruction.

5.3.1.2. Judgment. Instructors must possess judgment necessary to meet unexpected or induced emergencies, and the ability to exercise sound judgment through mature realization of their own, their student's, and the aircraft's limitations.

5.3.1.3. Personal Qualities. The instructor must have patience, tact, understanding, and the desire to instruct others. Instructors must have a personality which inspires and wins respect of each student.

5.3.1.4. Technical Knowledge. The instructor must be thoroughly familiar with respective aircraft systems and equipment, normal and emergency operating procedures. Additionally, all instructors must be thoroughly familiar with aviation management, flying training, and flying operations publications.

5.3.1.5. Flying Experience. Instructors must possess reasonable flying experience to include desired standards of skill and proficiency in both the aircraft and assigned missions. Flying hours alone cannot be accepted as criteria for selection to instructor.

5.3.1.6. Tactical Experience. The instructor must be familiar with respective aircraft defensive systems and equipment. They must be familiar with how their MDS can be employed in threat areas. They must be familiar with AFTTP applicable volumes.

5.3.1.7. Instructor Pilots. Instructor pilots are responsible at all times for the conduct of the flight and safety of the aircraft. If at any time during the flight, the judgment or proficiency of the student at the controls raises a question in the instructor's mind as to the student's ability to safely complete a prescribed maneuver, the instructor will immediately take over the controls of the aircraft. The instructor should then explain and demonstrate proper methods of conducting the maneuver prior to the student resuming

control of the aircraft. All instructors will place special emphasis on the procedures for positive identification of emergency conditions before initiating corrective action. In addition, instructors will place a high emphasis on the procedures for positive exchange of control; these procedures will be thoroughly briefed.

5.3.1.8. Instructor Aircrew Members (Other Than Pilots). Each instructor aircrew member is responsible for the safe execution of the duties of their respective crew position. At any time during the flight, if the judgment or proficiency of the student should raise a question in the instructor's mind as to the student's ability to safely execute the duties of the aircrew position, the instructor will immediately assume those duties. The instructor should then explain and demonstrate the proper method of executing those duties.

5.3.1.9. Instructor Deficiencies. Instructors who demonstrate deficiencies in their ability to instruct may be used in their primary crew position (provided the deficiency does not involve primary crew duties). Commanders will take the necessary action to either retrain or remove those individuals from instructor status IAW Air Force, AFSOC, and ANG directives.

5.3.1.10. Instructor Responsibilities. Instructors will be thoroughly familiar with all courseware and contents of the applicable attachments to this instruction for qualification, upgrade, and specialized training they are required to administer.

5.3.2. Initial Candidates. All initial instructor upgrade candidates must be MR in their unit's mission for a minimum of 6 months and meet the flying hour requirements identified in this paragraph. (T-2) **Exception:** ANG instructor candidates, with operations group commander approval, may begin upgrade training without meeting the flying hour requirements below. (T3)

5.3.2.1. Instructor Upgrade Prerequisites. Instructors in basic qualification status may keep basic qualification instructor status during mission qualification training. However, before they can instruct in mission events, they must finish mission qualification training and satisfactorily complete an evaluation IAW AFI 11-2EC-130J, Volume 2. Total flying hour requirements as posted in flying tables for pilots are flying hours in that crew position. All other crew positions are specified in their respective paragraphs.

5.3.2.2. Instructor Pilot. Instructor pilot candidates must meet the requirements listed in **Table 5.2** of this instruction. (T-2)

Table 5.2. Minimum Hours Required to Upgrade to Instructor Pilot (T-2).

TOTAL HOURS	PMAI HOURS
Over 2,000	200
1,800-1,999	300
1,500-1,799	500

5.3.2.3. Instructor WSO/CSO. Have a minimum of 1,000 hours total time and at least 200 PMAI hours. (T-3)

5.3.2.4. Instructor MCC. Have a minimum of 750 hours total time and at least 200 PMAI hours. (T-3)

5.3.2.5. Instructor LM. Have at least a 5-level Loadmaster primary AFSC, 100 PMAI hours and a minimum of 1 year experience on an AFSOC mission aircraft. (T-3)

5.3.2.6. Instructor ECS. Must be qualified as an MK3, have a minimum of 750 hours total time, and at least 200 PMAI hours. (T-3)

5.3.3. Ground and Flight Training Requirements. Before being designated an instructor, candidates will demonstrate to a flight examiner their ability to instruct and perform selected maneuvers and items according to applicable directives. In addition, all candidates will adhere to the following: (T-2)

5.3.3.1. Qualify in the applicable formal school instructor course for their crew position IAW the ETCA. If no formal school instructor course exists, conduct ground and flying training IAW the applicable MAJCOM syllabi/AF Form 4111. First time instructors must complete Academic Instructor Training Course (AITC) or equivalent.

5.3.3.2. BAQ instructors may keep that status during mission qualification. Prior to instructing mission events, they must finish MQT and complete an instructor flight evaluation on a tactical mission.

5.3.4. Instructor Requalification. See AFI 11-202, Vol. 1 and applicable MAJCOM supplement.

5.3.5. Instructor Transfers. See AFI 11-202, Vol. 1 and applicable MAJCOM supplement.

5.3.6. Crewmembers Previously Qualified as USAF Aircrew Instructors. See AFI 11-202, Vol 1 and applicable MAJCOM supplement. With OG/CC approval, these crewmembers may upgrade in-unit without a SMT waiver. (T-3) OG/CCs should take into consideration the previously-qualified instructor's experience with AFSOC roles, missions, and C2. They must meet requirements of paragraph 5.3.2. of this instruction. (T-2)

5.4. Flight Examiner Upgrade. Flight examiners are selected from the most qualified and competent instructors. Candidates are nominated by 193 SOS/CC, 193 OSF/CC, or 193 OG/OGV through the Aircrew Review Board and approved by the 193 OG/CC. Before being designated as a flight examiner, candidates will demonstrate satisfactory knowledge of command training and evaluation policies and procedures. In addition, they will demonstrate the ability to administer an evaluation IAW AFI 11-2EC-130J, Vol. 2. Certification will be annotated on AF Form 1381/4348, *USAF Certification of Aircrew Training*.

5.5. Special Mission Qualifications and Certifications. The commander will select aircrew members qualified in the unit's mission to maintain additional special qualifications and certifications. (T-3) A flight evaluation is required for Special Mission Qualifications, while Certifications are gained IAW [paragraph 5.6](#) of this instruction. (T-2) Special mission events are not considered core mission events and are not required for MR status. Instructors are authorized to teach any special qualifications in which they are qualified and current unless specifically restricted.

5.5.1. MP NVG Takeoff and Landing certification. Units may certify mission qualified MP to perform non-max effort NVG takeoffs and landings. Make a "MP NVG Takeoff and Landing" entry in the AF Form 1381/4348 upon certification and maintain currency IAW Table 4.5. (mission currency).

5.5.2. Airdrop Certification. Units may certify selected MP/MC, LM, CSO, and WSO candidates to perform Military Free Fall airdrops. Conduct IAW the appropriate AF Forms 4111 followed by special mission evaluation IAW AFI 11-2EC-130J, Vol 2.

5.5.2.1. CDS Airdrop ICDS, JPADS ICDS, and JPADS Certification and Currency. ICDS and JPADS certification will be completed in accordance with the JPADS training syllabus and guide. JPADS PADS operator (PO) mobile training team (MTT) instructors must be an IP, WSO/CSO, but are not required to be qualified in the MDS (e.g., a certified C-130J IP may perform PADS operator primary or instructional duties on a C-130E/H). For non-MDS qualified crew members, log other time with crew duty position as XP. Crewmembers that previously completed the interim JPADS training syllabus are considered JPADS certified. All crewmembers will complete Phase I training. Phase I Pilots will receive a JPADS certification, but will not require any continuation training. In addition, crewmembers performing PADS Operator (PO) or loadmaster (LM) duties will complete Phase II qualification training, and require continuation training. PO qualification includes I-CDS and JPADS drop operations. If a unit/MTT does not have access to syllabus-required training equipment, instructors will, with unit CC/DO concurrence, determine if a PO student has received sufficient instruction for certification. All simulated events must be verbally debriefed. For example, if a unit has dropsondes but no AGU, consider the PO syllabus Wireless Transfer Event complete if the student imports dropsonde data and simulates Wireless AGU Data Transfer. LM certification is split into I-CDS (Phase I) and JPADS operations (Phase II). LMs that do not complete hands-on AGU training will be certified as Phase I only until JPADS Phase II training is complete. (T-2)

5.5.2.2. Units may document Phase I training on AF IMT 1522, ARMS Additional Training Accomplishment Report for non-PO pilots. Use ARMS event identifiers Q502 "JPADS/I-CDS certification" for non-PO certified pilots, Q521 "JPADS Phase I" for I-CDS/non-guided certified loadmasters, and Q522 "JPADS Phase 2" for PADS Operator certified aircrew members and JPADS certified loadmasters.

5.5.2.3. The PADS Operator (PO) is defined as any JPADS Phase II certified rated officer. Normally this consists of a WSO/CSO, but may also be a PADS Operator from another airframe (e.g., C-130E/H, C-17) or pilot. For the purposes of non-current PADS Operators who need an instructor, like specialty is not required (e.g., a navigator PADS Operator may instruct a pilot PADS Operator on events **AD23**).

5.5.3. Maximum Effort Takeoff and Landings. Units may certify selected MPs to perform Maximum Effort/Maximum effort type Takeoff and Landings. Make a "Maximum Effort Takeoff and Landing" entry in the AF Form 1381/4348 upon certification and maintain currency IAW Table 4.5. (mission currency).

5.5.4. Air Refueling (AAR) Contact Qualification. Conduct IAW the appropriate AF Forms 4111 followed by a special mission evaluation IAW AFI 11-2EC-130J, Volume 2. AAR contact pilots are trained and qualified in both seats.

5.5.5. ECS. TV-80 Cavity Swapping. IAW T.O. 1C-130(E)J-43-4 complete television inflight tuning.

5.5.6. ECS. TV-80 Line Flatteners Tuning. IAW T.O. 1C-130(E)J-43-4, adjust antenna line flatteners for minimum reflected power using either the network analyzer or low power tuning procedure.

5.5.7. ECS. 1KW Antenna Sweeps and RF Distribution Manifold changes. IAW SPO and MAJCOM directed guidelines, complete antenna sweeps using the network analyzer and appropriately re-route 1KW transmitter to antenna or TV Driver to Antenna safely. (T-3)

5.6. Instructor Certified Events. Table 5.4. lists events which require instructor certification on the AF Forms 1381/4348 and the crew positions that require certification. These events may be taught at the formal school as part of mission qualification training. Formal school instructors will make AF Form 1381/4348 entries for all Table 5.4. training completed during mission qualification. Instructors are authorized to teach any event in which they are certified and current unless specifically restricted. Complete training IAW MAJCOM approved AF Form 4111 and the guidance below:

5.6.1. Air-to-Air Refueling. Train WSO and FSO to refuel from USAF air refueling platform. Flight training can be accomplished with either aircraft. Basic Aircraft Qualified crews may be certified in AAR. Upon completion of mission qualification, certify as an AAR crew member.

5.6.2. Functional Check Flight (FCF). Units may use the formal training FCF course when available. Training may be conducted in unit, without a waiver, using the MAJCOM approved AF FORM 4111. After instructor certification on the AF IMT 1381/4348, maintain currency IAW MAJCOM policy.

5.6.3. NVG Airland. P, CSO/WSO, LM must complete NVG Airland training and certification prior to performing NVG Airland operations. Accomplish IAW MAJCOM approved AF FORM 4111. Upon completion of mission qualification, certify as an NVG crew member. (T-2)

5.6.4. Air-to-air Refueling Instructor. P, LM must complete AAR Instructor training and certification prior to teaching AAR. Accomplish IAW MAJCOM approved AF Form 4111. Upon completion of the IP/IL check ride, certify as an Air Refueling Instructor. (T-2)

5.6.5. Military Free Fall certification for WSO and CSO crew positions shall be accomplished IAW MAJCOM approved AF FORM 4111.

5.6.6. Touch and Go Landings. New MPAs will have 100 hours PIC prior to entering training. Until training is complete, new MPAs may not allow FP/FC/MP/MC to accomplish touch and go landings. (T-2)

5.6.7. Differences Training. Per Chapter 2 and Chapter 3. This should only be entered on the AF Form 1381/4348 if the individual became qualified by differences training IAW para. 2.6.

5.6.8. Maximum Effort certification training will be accomplished for MCs in the right seat for PM duties only IAW MAJCOM approved AF IMT 4111. (T-2)

5.6.9. Unimproved Landing Certification. Conduct this one-time training for MPs under the direct supervision of an instructor on dirt or unimproved airfields using maximum effort procedures. Unimproved airfields are airfields where runway acquisition and ground operations are complicated by blowing snow, sand, or dirt, undulating terrain, minimum runway lighting, or markings. MCs only perform PM duties. Only affects MR status for missions requiring unimproved field landings. Units will record and track this training IAW an AF IMT 4111. (T-2)

5.6.10. FARP. Forward Area Refueling Point certification training will be accomplished for P, CSO/WSO, and LM IAW MAJCOM approved AF FORM 4111. (T-2) CSO/WSO will accomplish phase 1 training and will be certified as a FARP crew member. (T-2) Initial certification will include FARP knowledge, checklist procedures, and emergency procedures. Loadmaster initial certification, as both Panel Operator (PO) and Hot Refueling Supervisor (HRS), will include FARP knowledge, checklist procedures, and emergency procedures. (T-2)

Table 5.3. Instructor Certified Events (T-2).

INSTRUCTOR CERTIFIED EVENTS	Crew Positions	Notes
Air to Air Refueling	WSO, CSO	3
FCF	P, LM	
NVG Airland	MP, MC,CSO/WSO,LM	
Air to Air Refueling Instructor	IP,IL	
Military Free Fall	WSO, CSO	
Touch and Go Landings	MPA	2
Maximum Effort Landing	MP	
Unimproved Landing Certification	MP	2
Forward Area Refueling Point (FARP)	MP,MC,LM	
TV-80 Cavity Swap	PT	
TV-80 Line Flattener Tuning	PT	
Antenna Sweeps and RF Distribution Manifold Changes	PT	
Notes: Instructor Certified Events on this table require		

INSTRUCTOR CERTIFIED EVENTS	Crew Positions	Notes
<p>documentation on the AF Form 1381/4348.</p> <ol style="list-style-type: none">1. Other crew positions may be qualified at unit commander discretion.2. Pilot in Command (PIC, aka Aircraft Commander) must have a minimum of 100 hours in command of C-130 type aircraft prior to certification.3. AAR qualified Basic instructor CSO/WSO may instruct air to air refueling.		

HERBERT J. CARLISLE, Lt Gen, USAF
DCS, Operations, Plans and Requirements

Attachment 1**GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION*****References***

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Abbreviations and Acronyms

AAA—Anti-aircraft Artillery
AAR—Air-to-air Refueling
AC—Aircraft Commander
ACC—Air Combat Command
ACDE—Aircrew Defense Ensemble
ACDT—Aircrew Chemical Defense Training
AD—Air Drop
ADIZ—Air Defense Identification Zone
ADSC—Active Duty Service Commitment
AERPS—Aircrew Eye and Respiratory Protection System
AETC—Air Education and Training Command
AF—Air Force
AFCAT—Air Force Catalogue
AFE—Aircrew Flight Equipment
AFI—Air Force Instruction
AFOSI—Air Force Office of Special Investigation

AFPC—Air Force Personnel Center
AFPD—Air Force Policy Directive
AFRCI—Air Force Reserve Command Instruction
AFSC—Air Force Specialty Code
AFSOC—Air Force Special Operations Command
AFSOI—Air Force Special Operations Command Instruction
AFSOF—Air Force Special Operations Forces
AFSOF—Air Force Special Operations Forces
AFTL—Air Force Task List
AFTTP—Air Force Tactics, Techniques, and Procedures
AGU—Airborne Guidance Unit
AI—Airborne Intercept
AITC—Academic Instructor Training Course
ANG—Air National Guard
AOR—Area of Responsibility
APS—Aircrew Proficiency Sortie
ASRR—Airfield Suitability and Restrictions Report
AR—Aerial Refueling
ARC—Air Reserve Component
ARMS—Aviation Resource Management System
ATC—Air Traffic Control
ATD—Aircrew Training Device
ATS—Aircrew Training System
BAI—Backup Aircraft Inventory
BAQ—Basic Aircraft Qualification
BMC—Basic Mission Capable
CBRNE—Chemical, Biological, Radiological, Nuclear, and High-yield Explosive
CBT—Computer Based Training
CC—Commander
CCPT—Cross Crew Position Training
CDS—Container Delivery System
CDTQT—Chemical Defense Task Qualification Training

CFETP—Career Field Education and Training Plan
CJSOAC—Combined Joint Special Operations Air Component
CLM—Course Lesson Map
CMS—Combat Mission Sortie
CMT—Combat Mission Training
COMSEC—Communications Security
CONUS—Continental United States
CPT—Cockpit Procedures Trainer
CRM—Crew Resource Management
CRRC—Combat Rubber Raiding Craft
CSAR—Combat Search and Rescue
CSO—Combat Systems Officer
d—Days
DO—Director of Operations
DOC—Designed Operational Capability
DoD—Department of Defense
DOT—Director of Operations Training
DOTD—Drogue chute Only Training Drops
DNIF—Duty Not Involving Flying
DRU—Direct Reporting Unit
E—Exceptional
EC—Electronic Combat
ECM—Electronic Countermeasures
ECS—Airborne Electronic Communications System (ECS) Operator.
EPT—Emergency Parachute Training
ERO—Engine Running ON/OFF load
ETCA—Education and Training Course Announcements
EV—Evaluation
EW—Electronic Warfare
FAIP—First Assignment Instructor Pilot
FAR—Federal Air Regulations
FARP—Forward Area Refueling Point

FCF—Functional Check Flight
FCG—Foreign Clearance Guide
FCIF—Flight Crew Information File
FCIS—Flight Crew Information Summary
FEF—Flight Evaluation Folder
FIP—Flight Instructor Preparatory
FLIP—Flight Information Publication
FM—Financial Management
FM—Frequency Modulation
FOA—Field Operating Agency
FP—Flight Pilot
FS—Flight Surgeon
FSO—Flight Systems Officer
FTL—Flying Training Level
FTU—Field Training Unit
GT—Ground Training
GTL—Ground Training Level
HDP—Hose Deployment Personnel
HF—High Frequency
HTWA—Horizontal Trailing Wire Antenna
I—Incomplete
IAW—In Accordance With
ICAO—International Civil Aviation Organization
ICS—Interplane Communication System
ID—Identification
IFF/SIF—Identification Friend or Foe/Selective Identification Feature
IMT—Information Management Tool
IN—Incompatible
IP—Instructor Pilot
IRC—Instrument Refresher Course
ISOPREP—Isolated Personnel Report
JMET—Joint Mission Essential Tasks

JPADS—Joint Precision Aerial Delivery System

JSSA—Joint Services SERE Agency

LM—Loadmaster

LOAC—Law of Armed Conflict

LOC—Line of Communication

LNO—Liaison Officer

LPS—Local Proficiency Sortie

LZ—Landing Zone

M—Mission

m—Months

MAJCOM—Major Command

MAP—Missed Approach Point

Max—Maximum

MC—Mission Copilot or Mission Capable

MDA—Minimum Descent Altitude

MDS—Mission Design Series

MET—Mission Essential Task

METL—Mission Essential Task List

MF—Medium Frequency

MFR—Memorandum for Record

MIF—Maneuver Item File

MISO—Military Information Support Operations

MOA—Memorandum of Agreement

MOST—Mission Oriented Simulator Training

MP—Mission Pilot

MPA—Mission Pilot Aircraft Commander

MPF—Military Personnel Flight

MSN—Mission

MSO—Missions System Officer

MQT—Mission Qualification Training

MR—Mission Ready

MX—Maintenance

N—Night
NAF—Numbered Air Force
NB—Narrow Band
NBCC—Nuclear, Biological, Chemical, and Conventional
NCO—Noncommissioned Officer
NCOIC—Noncommissioned Officer In Charge
NOTAMS—Notice to Airman
NGB—National Guard Bureau
NVD—Night Vision Device
NVG—Night Vision Goggles
OCONUS—Outside Continental United States
OG—Operations Group
OJT—On the Job Training
OPR—Office of Primary Responsibility
OPS—Operations
OSA—Operational Support Aircraft
OSS—Operations Support Squadron
OTH—Other
P—Pilot
PA—Proficiency Advance
PAA—Primary Aircraft Assigned
PADS—Precision Aerial Delivery System
PCS—Permanent Change of Station
PDO—Publications Distribution Office
PDS—Personnel Data System
PF—Pilot Flying
PFT—Programmed Flying Training
PM—Pilot Monitoring
PMAI—Primary Mission Aircraft Inventory
POC—Point of Contact
PO—PADS Operator
PQP—Prior Qualified Pilot

PRO—Proficiency
PSF—Pounds per Square Foot
PT—Program Technician
PTT—Part Task Trainer
Q—Quarter
R—Remedial
RAP—Ready Aircrew Program
RDS—Records Disposition Schedule
RPL—Required Proficiency Level
RTM—RAP Tasking Memorandum
RWR—Radar Warning Receiver
S—Satisfactory
SABC—Self-Air/Buddy Care
SAM—Surface-to-Air Missile
SARP—Standards and Recommended Practices
SATB-C—Standard Airdrop Training Bundle - using CDS procedures
SATB-H—Standard Airdrop Training Bundle - using Heavy Equipment procedures
SATCOM—Satellite Communications
SCA—Self Contained Approach
SERE—Survival Evasion Resistance Escape
SIM—Simulator
SKA—Skills, Knowledge, and Attitudes
SMT—Secondary Method Training
SOF—Special Operation Forces
SoF—Supervisor of Flying
SOI—Syllabus of Instruction
SOPE—Special Operations Planning Exercise
SOS—Special Operations Squadron
SOW—Special Operations Wing
Sup—Supplement
T—Transition
TDY—Temporary Duty

TL—Training Level

T.O.—Technical Order

TOT—Time Over Target

TSRTS—Threat Signal Recognition Training System

TTP—Tactics, Techniques, and Procedures

TX—Transition Course

TW—Trailing Wire

U—Unsatisfactory

UHF—Ultra-High Frequency

UPT—Undergraduate Pilot Training

USAF—United States Air Force

USAFWS—United States Air Force Weapons School

USSOCOM—United States Special Operations Command

UTA—Unit Training Assembly

VFR—Visual Flight Rules

VHF—Very High Frequency

VTRAT—Visual Threat Recognition and Avoidance Trainer

VTWA—Vertical Trailing Wire Antenna

WB—Wide Band

WIC—Weapons Instructor Course

WSO—Weapons Systems Officer

WX—Weather

Terms

Air National Guard (ANG)—All units, organizations, and members of the Air National Guard of the United States.

Air Refueling (AAR)—For the purposes of this instruction, airborne fuel onload (simulated or actual) by EC-130J receiver aircraft.

Airborne Electronic Communications Systems (ECS) Operator—An electronic equipment operator on an EC-130J Commando Solo aircraft whose in-flight duties involve the operation of broadcast equipment in commercial and military radio/television frequency bands in support of the unit's mission. Also referred to as Airborne Mission Systems Specialists (AMSS) of other platforms.

Aircrew Review Board (ARB)—The ARB is designed to provide an overview of the 193 OG training program, provide a forum for informal discussions about current issues, as well as to approve upgrade nominations for all crew positions. 193 OSF/A3T is responsible to organize,

and prepare minutes to document upgrade nominations that were approved. Normally, the ARB is attended by 193 OG/CC, 193 SOS/CC, 193 SOS/DO, 193 OSF/A3T, 193 OG/OGV, and the appropriate section chief for the needs of the ARB.

Backup Aircraft Inventory (BAI)—Aircraft assigned to a unit to assist in maintaining readiness. Aircraft designated as BAI assets do not receive funding or manning consideration for the unit.

Basic Aircraft Qualification Aircrew Member—An aircrew member who has satisfactorily completed qualification training in the basic aircrew position and maintains aircraft currency IAW this instruction.

Basic Mission Capable Aircrew Member—An aircrew member who has satisfactorily completed mission qualification and is maintaining 50 percent of the applicable mission qualification currency requirements of this instruction. Basic mission capable aircrew members may perform primary crew duties on any unilateral training mission. For other missions, the unit commander must determine the readiness of each basic mission capable aircrew member to perform primary crew duties.

Calendar Month—Requirements are due once per month and not necessarily associated with a 30/60 day requirement. For example, an aircrew member could accomplish the event on 1 February and then on 31 March the following month and still fulfill the requirement.

Conversion Training—Training is normally associated with a unit conversion to another MDS. Conversion training requires completion of a formal school initial qualification course. For unit conversions, when formal school courses are not available to handle the throughput, MAJCOMs will develop, and coordinate with the training command, in-unit training plans that maximize use of highly experienced personnel as the initial cadre.

Core Mission Events—An aircrew member must be qualified in all core mission events to be considered Mission Ready (MR) or Mission Capable (MC). To determine how non-currency in any core mission event affects overall mission currency, refer to the aircraft's Mission Ready Flying Requirements Table (Table 4.4.). Loss of qualification in any core mission event results in loss of overall mission qualification. A core mission event will be considered an instructor certified event when it is not required to be evaluated on the Initial Mission Evaluation. Squadrons will maintain at least 100 percent of their required manning as MR. AFSOC unit Squadron Commander and/or Director of Operations CC/DO will determine the status/qualification of aircrew members in excess of 100 percent manning requirement.

Difference Training—Training accomplished when changing between same design aircraft and the amount of training needed for qualification does not warrant attendance at a formal qualification course.

Dual Qualified—An aircrew member who is qualified in more than one crew position in the same MDS.

Event—A training item to be accomplished. Multiple events may be completed and logged during a sortie unless specifically excluded elsewhere in this instruction.

Flight Training Level—The experience-based semiannual training requirement level based on either flying hours or years of service.

Formal School Courseware—Training materials and programs developed for training aircrew members at formal schools. It includes all student study guides, workbooks, computer-based training lessons, instructor guides, and AF Forms 4111 related to the specific course.

Flight Systems Officer—An electronic warfare officer or a previously qualified EC-130E Commando Solo Navigator whose in-flight duties include using all available onboard and offboard defensive systems equipment to protect the aircraft.

Formal School Courseware—Training materials and programs developed for training aircrew members at formal schools. It includes all student study guides, workbooks, computer-based training lessons, instructor guides, and AF Form 4111, Individual Mission Grade Record, related to the specific course.

Formation Operations—Accomplish IAW applicable volume(s) of AFSOCI 11-202,

AFI 11—2EC-130J, Vol. 3, and ATP-56(B). AFSOC guidance will never be less restrictive than the formation definitions found in AFI 11-202, Vol 3, “Formation Flight”, “Nonstandard Formation”, and “Standard Formation”. Formation operations place all aircraft in a critical phase of flight which requires constant vigilance, strict discipline, and polished crew coordination for mission accomplishment. Training will ensure aircrew can think and plan for multiple aircraft instead of single ship operations.

Instructor Certified Events—Training given to an aircrew member that requires an instructor to certify the student's attainment of the required proficiency and knowledge levels as specified in courseware and, if appropriate, AF Forms 4111. Instructor certified events are documented in AF Form 1381/4348.

Mission Capable Aircrew Member—An aircrew member who has satisfactorily completed mission qualification and is maintaining currency requirements of this instruction. Mission capable aircrew members may perform primary crew duties on any unilateral training mission.

Military Information Support Operations (MISO)—Planned operations to convey selected information and indicators to foreign audiences to influence their emotions, motives, objective reasoning, and ultimately the behavior of foreign governments, organizations, groups, and individuals. The purpose of MISO is to induce or reinforce foreign attitudes and behavior favorable to the originator's objectives.

Mission Systems Officer (MSO)—An electronic warfare officer whose in-flight duties involve the direction and coordination of the mission crew on an EC-130J Commando Solo aircraft.

Mission Design Series (MDS) for Aircraft—The official designation for aerospace vehicles used to represent a specific category of aerospace vehicles for operations, support, and documentation purposes.

Mission Essential Task List (METL)—Combat-oriented training requirements. All AFSOC aircrew training requirements should be in support of unit METLs.

Mission Events—The squadron Designed Operational Capability (DOC) Statement defines required crew capabilities. These capabilities/tactics/events can be categorized as either Core or Special Mission.

Mission Oriented Simulator Training—Training conducted in a WST or MRD that incorporates a full mission profile. The focus of this training should be crew coordination and problem solving.

Mission Ready Aircrew Member—An aircrew member who has satisfactorily completed mission qualification and is maintaining all of the applicable mission qualification currency requirements of this instruction.

Multiple Qualification—A aircrew member who is qualified in more than one MDS.

Primary Mission Aircraft Inventory (PMAI)—Aircraft assigned to a unit for performance of its wartime mission. PMAI forms the basis for the allocation of operating resources to include manpower, support equipment, and funding of flying hours.

Self-contained Approach (SCA)—An approach conducted using self-contained navigation systems on the aircraft.

Semiannual Requirements—Events required to be completed within a six month period; those periods being October – March and April – September.

Special Mission Events—Some MR/MC aircrew members will carry additional qualifications in special mission events. Unit CC/DO will determine which aircrew members will be qualified in special mission events. Unit CC/DO will determine if special mission events have affected C-rating and report variations through Status Of Resources and Training Systems (SORTS). Special mission requirements are also shown in Table 4.5.

Total Flying Time—Total time for all aircraft flown in military service to include student time. Time accumulated must be in the aircrew member's current rating (i.e., pilot, navigator, etc.).

Training Status—A deficient status in which an aircrew member must fly under the supervision of an instructor when occupying a primary crew position. Once deficient items are corrected, the aircrew member is removed from training status.

Unit Training Assembly (UTA)—IAW ANG Instruction 36-2001, UTA's are drill periods consisting of four hours each. Normally four UTA's are scheduled on one weekend each calendar month.

Volume—For the purposes of this instruction, volume refers to the number of events an aircrew member must accomplish in a given period of time (i.e., quarterly or semiannually).

Weapons Systems Officer—A qualified electronic warfare officer whose duties encompass both the FSO and MSO positions.

Attachment 2

CHEMICAL DEFENSE TASK QUALIFICATION TRAINING (CDTQT)

A2.1. General. This attachment contains the initial and recurring aircraft CDTQT requirements for AFSOC aircrews. The purpose of CDTQT is to reinforce the crewmember's awareness of limitations and demonstrate physiological effects while wearing the aircrew chemical defense ensemble (ACDE). The complications of heat exhaustion, fatigue, hyperventilation, limited dexterity, and hampered communication can all be experienced during CDTQT. All aircrew members must complete initial aircrew flight equipment chemical defense training prior to accomplishing initial CDTQT. (T-2) Complete initial disaster preparedness training for the ground ensemble prior to CDTQT if the ground ensemble is used. Initial CDTQT will be done in the aircraft and also done in the aircraft at least every 4 years. If initial CDTQT is done in the simulator, the next event must be logged in the aircraft. All other times the event may be accomplished in the simulator. Accomplishing the event in the aircraft dual logs normal CDTQT. (T-2)

A2.2. CDTQT Procedures:

A2.2.1. Accomplish CDTQT in-flight using the primary unit aircraft. Crewmembers will perform primary crew duties while wearing the ACDE. All in-flight profiles must be a minimum of 1 hour and accomplished on training missions only. Accomplish CDTQT in the simulator using primary unit aircraft WSTs. All simulator profiles must be a minimum of 2 hours and flown on full tactical simulation profiles. This should include a threat scenario and aircraft emergencies. (T-2) Flying the simulator profile with the entire crew wearing ACDE is highly encouraged.

A2.2.2. The entire ACDE need not be used. Normally, wear the blower assembly unit, inter-communication box, cotton gloves, butyl rubber gloves, nomex gloves, and AERPS mask hood and helmet (if applicable). Either the ACDE or ground ensemble may be worn during aircraft preflight. Ground ensembles will come from training assets.

A2.2.3. When wearing the CBO mask, do not accomplish CDTQT when required to wear NVGs. When wearing AERPS, NVG events will be accomplished. (T-2)

A2.2.4. An observer is required to monitor each crewmember while accomplishing CDTQT in-flight. An instructor or flight examiner in each respective crew position, not wearing the chemical defense components, will act as the observer for initial CDTQT. **Exception:** An IP not wearing the ensemble and not performing any other instructor duties may act as the observer for initial WSO/FSO training. During recurring CDTQT, if the crewmember can be directly observed by another primary crewmember, a dedicated observer is not required. The dedicated observer during recurring CDTQT may also wear AERPS for all crew positions except pilots (two non-pilot crewmembers wearing AERPS may observe one another). Additionally, for safety purposes, one crewmember in the back of the aircraft must not be wearing AERPS in case of smoke and fumes. (T-2)

A2.2.4.1. An instructor or flight examiner pilot not wearing the chemical defense components will occupy the opposite seat during initial pilot CDTQT. During recurring CDTQT, a mission qualified pilot not wearing the chemical defense components will act as the observer and occupy the opposite seat. With squadron commander approval, both pilots may wear AERPS while occupying the pilot seats provided both pilots have accomplished CDTQT within the past 90 days. The squadron commander may delegate this authority to the operations officer or mission commander. (T-2)

A2.2.4.2. Observers will closely monitor aircrew members actions during CDTQT. If an aircrew member experiences difficulties such as excessive thermal stress, headaches, hyperventilation, nausea, etc., the aircrew member will remove the ensemble. The observer will notify the AC of any difficulties encountered.

A2.2.4.3. Pilots will accomplish a minimum of one approach and landing. Pilots may accomplish CDTQT in either seat.

A2.2.4.4. All other aircrew members will credit CDTQT while performing their normal crew duties in-flight

A2.3. Mission profile. Crewmembers will accomplish CDTQT during a normal mission profile. In addition: (T-2)

A2.3.1. Pilots will accomplish a minimum of one approach and landing. (T-2)
Pilots may accomplish CDTQT in either seat.

Attachment 3**PILOT/LOADMASTER SIMULATOR REFRESHER COURSE**

A3.1. Pilot/Loadmaster Simulator Refresher Course. The simulator refresher course is designed to improve standardization and to provide maximum training on normal, instrument, and emergency procedures. The course is scheduled to be completed in 16 hours. The course consists of consecutive 4-hour simulator missions with an in-depth systems pre-briefing and debriefing for each mission. The pre-briefing and simulator mission will thoroughly review the areas below. (T-3) Modifications may be made to meet unit aircraft differences. Students will not be evaluated by Flight Examiners during this training.

A3.2. Mission Pre-briefing. The mission pre-briefing will include normal operations, limitations, and malfunctions of the following aircraft systems as well as associated emergency procedures: (T-3)

A3.2.1. Oxygen system.

A3.2.2. Smoke, overheat, and fire detection and extinguishing systems.

A3.2.3. Fuel system:

A3.2.3.1. Air refueling system (UARRSI).

A3.2.4. Environmental:

A3.2.4.1. Bleed Air/Environmental Control System.

A3.2.4.2. Air conditioning system.

A3.2.4.3. Pressurization system.

A3.2.5. Anti/deicing systems.

A3.2.6. Electrical system:

A3.2.6.1. AC power sources and buses.

A3.2.6.2. AC power distribution system.

A3.2.6.3. DC power distribution.

A3.2.6.4. Ground and emergency power.

A3.2.7. Engines:

A3.2.7.1. Engine oil system.

A3.2.7.2. Engine starting and ignition.

A3.2.8. Propellers.

A3.2.9. Instruments:

A3.2.9.1. Pitot-static systems.

A3.2.9.2. Compass system.

A3.2.10. Hydraulics:

A3.2.10.1. Hydraulic systems.

A3.2.10.2. Flight controls.

A3.2.10.3. Landing gear.

A3.2.10.4. Brake systems.

A3.2.10.5. Aft cargo door and ramp.

A3.2.11. Communication Navigation Identification Management Unit (CNI-MU).

A3.2.11.1. Communication Tune.

A3.2.11.2. Navigation Tune.

A3.2.11.3. IFF.

A3.2.11.4. Navigation Control.

A3.2.11.5. Missions.

A3.2.11.6. Direct Intercept.

A3.2.11.7. Mission Computer Index.

A3.2.11.8. Legs.

A3.2.11.9. Progress.

A3.2.11.10. Route pages.

A3.2.12. Integrated flight control system:

A3.2.12.1. Autopilot.

A3.2.12.2. Flight director system.

A3.2.12.3. Reference Mode Panel settings effect on flight director.

A3.2.12.4. AMU setting affecting automatic flight.

A3.2.13. Adverse weather operation, hot and cold weather operations, thunderstorm avoidance, and windshear.

A3.2.14. Current trends of accidents, incidents, and equipment malfunctions.

A3.2.15. Mission computer normal and emergency operations.

A3.3. Additional Areas. Thoroughly review the following additional areas:

A3.3.1. Crash landing.

A3.3.2. Bailout.

A3.3.3. Ditching.

A3.3.4. Performance data.

A3.3.5. Driftdown.

A3.3.6. Three-engine takeoff.

A3.3.7. Stalls and recoveries. Devote a minimum of 30 minutes of academic classroom training to a discussion of:

A3.3.7.1. Situations in which the aircraft is most susceptible to stall.

A3.3.7.2. Avoiding stalls when encountering those situations.

A3.3.7.3. Importance of crew coordination in preventing stalls.

A3.3.7.4. Stall recognition and recovery procedures.

A3.3.7.5. Relationship and effects of density altitude, airspeed, gross weight, bank angles, wing loading, and how they affect stalls.

A3.3.7.6. How to prevent secondary stalls.

A3.3.7.7. Fin stalls.

A3.3.8. Mission profile briefing (prior to each mission).

A3.4. Simulator Missions. Simulator missions will include the following areas: (T-3)

A3.4.1. Pilot judgment and quick decision problems:

A3.4.1.1. Minimum of one quick decision problem for each simulator period.

A3.4.1.2. Instrument approaches and engine out procedures with emphasis on instrument approaches.

A3.4.1.3. Minimum of two rejects and one engine failure after refusal speed per crew on each simulator mission.

A3.4.2. Minimum of two planned tactical missions where conditions can be altered or emergencies created that will test the crew's ability to think and plan during periods of stress. Emphasis should be placed on the appropriate conditions that special operations crews operate at night and while air refueling.

A3.4.3. Minimum of one planned mission where runway length is critical, minimum altitude for terrain/obstacle clearance during climb, cruise, and descent is stressed, and examples of operating and experiencing emergencies at heavy gross weights (155,000 lbs and greater) is demonstrated.

A3.4.4. Emergencies and malfunctions will cover the following at least once during the length of the course. The items not covered in the simulator will be discussed during briefing and debriefing.

A3.4.4.1. APU fire.

A3.4.4.2. Starting malfunctions.

A3.4.4.3. Engine fire on ground.

A3.4.4.4. Wing isolation and bleed air valve failure.

A3.4.4.5. Aborted takeoff.

A3.4.4.6. Engine fire or failure takeoff continued.

A3.4.4.7. Runaway pitch trim.

- A3.4.4.8. Engine overheat.
- A3.4.4.9. Precautionary engine shutdown.
- A3.4.4.10. Engine failure or fire in-flight.
- A3.4.4.11. Air start.
- A3.4.4.12. Fuel jettison.
- A3.4.4.13. Fuselage fire.
- A3.4.4.14. Smoke and fume elimination.
- A3.4.4.15. Electrical malfunctions and fire, including four-engine power loss.
- A3.4.4.16. Turbulence and thunderstorms.
- A3.4.4.17. Engine, wing, and empennage icing.
- A3.4.4.18. Air conditioning compartment overheat.
- A3.4.4.19. Bleed air leak.
- A3.4.4.20. Oil system failure.
 - A3.4.4.20.1. Low quantity.
 - A3.4.4.20.2. Low pressure.
 - A3.4.4.20.3. High temperature.
- A3.4.4.21. Landing gear failure.
- A3.4.4.22. Flight control failure.
- A3.4.4.23. Asymmetric flaps.
- A3.4.4.24. In-flight door warning.
- A3.4.4.25. Rapid decompression.
- A3.4.4.26. Emergency descent.
- A3.4.4.27. Three-engine approach and go-around.
- A3.4.4.28. Two-engine approach and go-around.
- A3.4.4.29. No-flap approach.
- A3.4.4.30. Wheels up landing.
- A3.4.4.31. Prop malfunctions.
- A3.4.4.32. Three-engine takeoff.
- A3.4.4.33. Mission Computer Failure.
- A3.4.4.34. Dual Mission Computer Failure-BIU Backup.
- A3.4.4.35. Navigation systems failure.
- A3.4.4.36. Overwater/Category 1 Navigation Procedures.

A3.4.4.37. Confidence Maneuvers - (steep turns, slow flight, approach to stalls, and stall recoveries).

A3.4.4.37.1. As a minimum, each pilot will accomplish the following:

A3.4.4.37.1.1. Power on and power off stalls with gear up/down for 0%, 50%, and 100% flap configurations.

A3.4.4.37.1.2. Stall will be performed for both straight and level flight and with varying bank angles (30, 45).

A3.4.4.37.1.3. Fin stalls.

A3.4.4.37.2. While stall training should be practiced at all altitudes, emphasize training at traffic pattern altitudes and lower. During recovery, stress minimum loss of altitude and avoiding entry into a secondary stall.

A3.4.4.38. Unusual attitude, spatial disorientation, and partial panel training.

A3.4.4.39. Controllability check (battle damage).

A3.5. Student Critiques. The mission debriefing will include a full debriefing and completion of a student critique. (T-3)

Attachment 4**COMBAT SYSTEMS OFFICER (CSO) REFRESHER TRAINING**

A4.1. General. The CSO refresher training is designed to improve standardization, provide training to improve and refine FSO skills. The training will be designed to cover the following areas as a minimum and is scheduled to be completed using available simulators/computer-based instruction. (T-3) This training should be scheduled during UTA's.

A4.2. Basic Qualification.

A4.2.1. Pre-mission Planning. Given a sample mission, prepare applicable charts and documents to fly the mission. (T-3)

A4.2.2. Preflight Fuel Management. Given a completed flight plan, compute preflight fuel management using forms and procedures as outlined in AFI 11-2EC-130J, Vol 3. For AR qualified CSO 's, a multiple leg fuel plan is required.

A4.2.3. In-flight Fuel Management. Given appropriate fuel planning documents and forms, compute fuel entries IAW AFI 11-2EC-130J, Vol 3.

A4.2.4. Execution Checklists, Air Tasking Orders, Special Instructions, and Communications Instructions/Matrix. Conduct a review of the format, and content, emphasizing verification of data to insure mission information is complete, accurate, and deconflicted.

A4.3. Mission Qualification.

A4.3.1. Publications. Using an instructor led discussion, review the following publications:

A4.3.1.1. AFTTP 3-1. E/MC-130J Tactical Employment-E/MC-130J (Classified)

A4.3.1.2. AFI 11-2EC-130J, Vol 3.

A4.3.1.3. Conduct a review of the applicable intelligence publications.

A4.3.2. Electronic Combat Principles. Using an instructor led discussion, review the following:

A4.3.2.1. Radar cross-section (RCS), resolution cell, radar horizon, and maximum range.

A4.3.2.2. Discuss terrain masking techniques.

A4.3.2.3. Discuss the various types of scan techniques employed by radar.

A4.3.2.4. Discuss moving target indicator and pulse doppler.

A4.3.2.5. Discuss the types of countermeasures employed by unit assigned aircraft.

A4.3.2.6. Discuss electronic counter-countermeasures which might be used to defeat the ECM systems onboard unit assigned aircraft.

A4.3.3. Countermeasures – IRCM and Chaff. Using an instructor led discussion, review the employment of IRCM and Chaff.

A4.3.3.1. Effectiveness of IRCM (AN/ALE-47).

A4.3.3.2. Effectiveness of chaff.

A4.3.4. Threats. Using an instructor led discussion, review the following threat systems:

A4.3.4.1. Review the ground and sea based SAM systems in the unit's area of responsibility (AOR).

A4.3.4.2. Review the air-to-air threat systems in the unit's AOR.

A4.3.4.3. Review the ground and sea based AAA systems in the unit's AOR.

A4.3.5. Tactics. Using an instructor led discussion, review tactics versus different threat types. Considerations should include but not be limited to: day/night conditions, multiple weapons types per threat, i.e. guns, IR missiles, radar missiles. Conduct threat analysis for airborne threats, surface-to-air missiles, and anti-aircraft artillery.

A4.3.6. Receiving Equipment. Using an instructor led discussion, review the capabilities and limitations of AN/ALR-56M.

A4.3.7. Mission Planning. Using an enemy order of battle, rules of engagement, target objectives, intelligence, support, and flight/mission planning materials and equipment, successfully plan a mission.

A4.3.7.1. Using a mission planning computer:

A4.3.7.1.1. Construct a target area chart.

A4.3.7.1.2. Construct a route chart.

A4.3.7.1.3. Compile all mission planning data for future study.

A4.3.8. Communications Systems Equipment and Procedures.

A4.3.8.1. KY-58.

A4.3.8.2. KYV-5 Automated Narrowband Digital Voice Terminal (ANDVT).

A4.3.8.3. Over-The-Air-Rekeying (OTAR) procedures.

A4.3.8.4. HAVE QUICK procedures.

A4.3.8.5. SATCOM.

A4.3.8.6. Simple Key Loader (SKL).

A4.3.8.7. HF Automatic Communications Processor (HF-ACP).

Attachment 5**MISSION CREW COMMANDER (MCC) REFRESHER TRAINING**

A5.1. General. The MCC refresher training is designed to improve standardization and provide maximum training. The training will be designed to cover the following areas as a minimum and is scheduled to be completed using available PTT/computer-based instruction. (T-3) This training should be scheduled during UTAs.

A5.2. Systems 1 – MCC Systems.

- A5.2.1. Audio mixer panel.
- A5.2.2. Circuit breaker panel.
- A5.2.3. ARC- 210 secure comm checklist.
- A5.2.4. Oxygen system.
- A5.2.5. Antenna switch panel.
- A5.2.6. Interphone panel.
- A5.2.7. Emergency procedures.

A5.3. Systems 2 – Aircraft Systems.

- A5.3.1. Special systems electrical network.
- A5.3.2. Frequency converters.

A5.4. Systems 3 – ECS Positions.

- A5.4.1. Program technician.
- A5.4.2. Trailing wire.
- A5.4.3. Wideband.
- A5.4.4. Narrowband.
- A5.4.5. Troubleshooting.

A5.5. Systems 4 – Misc. Systems.

- A5.5.1. Modulation.
- A5.5.2. Antenna systems.
- A5.5.3. Transmitters.
- A5.5.4. Partial task trainer.

A5.6. Systems 5 – Planning and Monitoring Systems.

- A5.6.1. Mission planning.
- A5.6.2. Liaison duties.
- A5.6.3. Mission systems data program.
- A5.6.4. MARCS and RF distribution monitoring with the MSO laptop.

Attachment 6**AIRBORNE ELECTRONIC COMMUNICATIONS SYSTEMS OPERATORS (ECS)
REFRESHER TRAINING**

A6.1. General. The ECS refresher training is designed to improve standardization, provide a review of equipment and capabilities, and to provide maximum training on systems, normal and emergency procedures. The training will be designed to cover the following areas as a minimum and is scheduled to be completed using available PTT/computer-based/classroom instruction. (T-3) This training should be scheduled during UTA's. MOST may also be included when scheduling permits. Students will not be evaluated during ECS Refresher Training or MOST.

A6.2. Systems 1 – Trailing Wire. (As required base on mission.)

A6.3. Systems 2 – Narrow Band.

A6.3.1. Program Check.

A6.3.1.1. RF and audio patch panels.

A6.3.1.2. Audio sources.

A6.3.1.3. Program material.

A6.3.1.4. Manual vs. MARCS.

A6.3.2. Power-up.

A6.3.2.1. Amplifiers, loads, and switch matrix.

A6.3.2.2. Filter and circulator.

A6.3.2.3. Receiver.

A6.3.2.4. Analyzer.

A6.3.2.5. Signal generator.

A6.3.3. Amplifier check.

A6.3.3.1. Transmitter.

A6.3.3.2. VSWR, frequency, and power.

A6.3.4. System check.

A6.3.4.1. Modes.

A6.3.4.2. Modulation.

A6.3.4.3. VSWR, power, harmonics.

A6.3.5. Antenna System Check.

A6.3.5.1. Bandpass.

A6.3.5.2. Antenna load.

A6.3.6. Event operation.

A6.3.6.1. Mode.

A6.3.6.2. Amp and load.

A6.3.6.3. Manual vs. MARCS.

A6.4. Systems 3 – Wide Band.

A6.4.1. Program check.

A6.4.1.1. RF, audio, video patch panels.

A6.4.1.2. Audio and video sources.

A6.4.1.3. Program material.

A6.4.1.4. Manual vs. MARCS.

A6.4.2. Power-up.

A6.4.2.1. Amplifiers, loads, and switch matrix.

A6.4.2.2. Filter, circulator.

A6.4.2.3. Receiver, demodulator.

A6.4.2.4. Analyzer, meter.

A6.4.2.5. Upconverter, signal generator.

A6.4.3. Amplifier check.

A6.4.3.1. Transmitter.

A6.4.3.2. VSWR, power, and frequency.

A6.4.3.3. Modulation standard.

A6.4.4. System check.

A6.4.4.1. Modes.

A6.4.4.2. Modulation (video and audio).

A6.4.4.3. Power, AGC, VSWR, frequency, and sync.

A6.4.5. Antenna system check.

A6.4.5.1. Bandpass.

A6.4.5.2. Antenna load.

A6.4.6. Event operation.

A6.4.6.1. Mode.

A6.4.6.2. Amp and load.

A6.4.6.3. Manual vs. MARCS.

A6.5. Systems 4 - Special Topics / Annual Review.

A6.5.1. Review mission auxiliary systems.

A6.5.1.1. Mission air conditioner system.

A6.5.1.2. Dry air system.

A6.5.2. Review aircraft emergency procedures.

A6.5.2.1. Mission equipment.

A6.5.2.2. Aircraft emergencies.

A6.5.3. Review current trends.

A6.5.3.1. Program Technician (PT) and Mission Crew Commander (MCC) duties.

A6.5.3.1.1. Combined/Joint psychological operations.

A6.5.3.2. Broadcast systems developments.

A6.5.3.3. Review program technician position.

A6.5.3.3.1. MSDP.

A6.5.3.3.2. COMSEC equipment.

A6.5.3.3.3. Systems monitoring and data collection.

A6.5.3.3.4. Quick salvos.

A6.5.3.3.5. Preflight duties.

A6.5.3.3.6. Bext 1KW FM transmitter operations

Attachment 7**LOADMASTER REFRESHER TRAINING**

A7.1. General. The loadmaster refresher training is designed to improve standardization and provide maximum training on loadmaster duties and responsibilities. This training should be scheduled during UTAs. Units will use formal school courseware when available and may add or delete items as applicable to their assigned aircraft and mission. (T-3) Schedule an aircraft or PTT for applicable portions of this training.

A7.2. Systems 1 – Publications.**A7.2.1. Publications.**

A7.2.1.1. Technical orders.

A7.2.1.2. AF publications.

A7.2.1.3. Command publications.

A7.2.1.4. FCIF and FCIS.

A7.2.1.5. Aircraft commanders mission kit (applicable portions).

A7.2.1.6. Loadmaster kit.

A7.2.1.7. Review loadmaster duties from AFI 11-2EC-130J, Vol. 3, and AFMAN 24-204(IP), *Preparing Hazardous Materials for Military Air Shipments*.

A7.2.1.7.1. Border clearance requirements.

A7.2.1.7.2. Local directives.

A7.2.2. Systems 2 - Aircraft Systems and Operations.

A7.2.2.1. Explain correct procedures, operational checks, and normal usage IAW T.O. 1C130(E)J-1, T.O. 1C-130J-9, T.O. 1C-130J-5-2, ATP-56(B), and T.O. 1C-130J-1-1:

A7.2.2.1.1. Public address system.

A7.2.2.1.2. Interphone/ICS system.

A7.2.2.1.3. Hydraulic systems:

A7.2.2.1.3.1. Flight Controls.

A7.2.2.1.3.2. Landing gear.

A7.2.2.1.3.3. Brake system.

A7.2.2.1.3.4. Cargo door and ramp.

A7.2.2.1.4. Oxygen systems.

A7.2.2.1.5. Fuel system, in-flight refueling systems:

A7.2.2.1.5.1. Fuel servicing.

A7.2.2.1.5.2. Fuel balance.

A7.2.2.1.5.3. Fuel jettison.

A7.2.2.1.6. Environmental:

A7.2.2.1.6.1. Bleed air.

A7.2.2.1.6.2. Air conditioning system, including special systems.

A7.2.2.1.6.3. Pressurization system.

A7.2.2.1.7. Lighting systems.

A7.2.2.1.8. Defensive systems (AN/ALE-47, AN/AAR-47 & AN/ALR-56M).

A7.2.2.1.9. Anti/de-icing systems, including special systems.

A7.2.2.1.10. Electrical system:

A7.2.2.1.10.1. AC power sources and buses, including special systems.

A7.2.2.1.10.2. AC power distribution system, including special systems.

A7.2.2.1.10.3. DC power distribution, including special systems.

A7.2.2.1.10.4. Ground and emergency APU start.

A7.2.2.1.11. Engines:

A7.2.2.1.11.1. Engine oil system.

A7.2.2.1.11.2. Engine starting.

A7.2.2.1.11.3. APU.

A7.2.2.1.11.4. Full authority digital electronic control (FADEC) and nacelle interface unit (NIU).

A7.2.2.1.12. Warning systems, advisory caution and warning system (ACAWS), fire overheat detection system (FODS), and smoke detection system.

A7.2.2.1.13. Propeller control systems.

A7.2.2.1.14. Instruments.

A7.3. Systems 3 - Cargo Loading Systems and Aids / Structural Limitations / Weight & Balance:

A7.3.1. Cargo loading systems and aids:

A7.3.1.1. Explain correct procedures, operational checks, and normal usage IAW T.O. 1C-130J-9 for cargo winching.

A7.3.1.1.1. Checklist procedures.

A7.3.1.1.2. Accessories.

A7.3.1.1.3. Winch procedures.

A7.3.1.1.4. Internal winching configuration.

A7.3.1.1.5. External winching configuration.

A7.3.1.1.6. Self-winching configuration.

A7.3.1.2. Explain correct procedures, operational checks, and limitations of the cargo handling system IAW T.O. 1C-130J-9 and T.O. 1C-130(E)J-1.

A7.3.1.2.1. Rail lock system.

A7.3.1.2.2. Pallet weight limitation.

A7.3.1.2.3. Rail limitations with missing core bolts.

A7.3.2. Structural limitations:

A7.3.2.1. Using the floor loading capacity chart in T.O. 1C-130J-9, determine the following:

A7.3.2.1.1. Contact area pressures (PSI).

A7.3.2.1.2. Contact area pressures (PSF).

A7.3.2.1.3. Linear foot limitations (PLF).

A7.3.2.1.4. Axle and wheel weight limits.

A7.3.2.1.5. Compartment load limits.

A7.3.2.2. Compute the area and PSI for specific items of cargo with and without shoring:

A7.3.2.2.1. Skid mounted cargo.

A7.3.2.2.2. Drums.

A7.3.2.2.3. Pneumatic tires.

A7.3.2.2.4. Solid rubber tires and steel wheels.

A7.3.3. Weight & balance:

A7.3.3.1. Determine formulas used for weight and balance and solve problems by using formulas to compute the center of gravity of an aircraft:

A7.3.3.1.1. Basic weight and balance formula.

A7.3.3.1.2. Center of gravity and load/shift formula.

A7.3.3.2. Weight and balance operations through the mission computer.

A7.3.3.3. Select and use charts and graphs required to complete DD Form 365-4, *Aircraft Weight and Balance Clearance Form F - Transport*:

A7.3.3.3.1. T.O. 1C-130(E)J-1, weight limitations charts.

A7.3.3.3.2. T.O. 1C-130J-5-1 and T.O. 1C-130J-5-2, loading charts.

A7.3.3.3.3. AFSOCI and AFI appropriate volumes.

A7.4. Systems 4 - Airlift of Hazardous, Perishable, Classified Materials, and Cargo Requiring Special Handling:

A7.4.1. Using AFMAN 24-204 (IP), state restrictions and precautions for handling, loading, and airlifting of hazardous materials:

A7.4.1.1. Restrictions from compatibility chart.

A7.4.1.2. Procedures for utilizing Traffic Transfer Receipt.

A7.4.1.3. Safety precautions and Shippers Handling/Data Certification.

A7.4.1.4. Procedures for utilizing DD Form 2133, *Joint Airlift Inspection Record*.

A7.4.1.5. Protective clothing and equipment.

A7.4.2. IAW AFMAN 24-204 (IP), state procedures for airlifting the following:

A7.4.2.1. Mail.

A7.4.2.2. Biological material.

A7.4.2.3. Classified material.

A7.5. Systems 5 - Load Planning / Applied Load Restraint:

A7.5.1. Load planning:

A7.5.1.1. Review the basic principles of load planning and demonstrate the use of projection charts in T.O. 1C-130J-9.

A7.5.1.2. Load plan given mixed loads to include the following:

A7.5.1.2.1. Palletized cargo.

A7.5.1.2.2. Distributed cargo.

A7.5.1.2.3. Concentrated cargo.

A7.5.1.2.4. Hazardous cargo.

A7.5.1.2.5. Vehicles.

A7.5.1.2.6. Troops.

A7.5.1.3. Using load plan and chart E, compute DD Form 365-4.

A7.5.2. Applied load restraint:

A7.5.2.1. State restraint criteria and tie-down capacities. Using a tape measure, compute required restraint on selected items:

A7.5.2.1.1. Directional restraint requirements.

A7.5.2.1.2. Tie-down devices, straps.

A7.5.2.1.3. Use of chain bridle and chain gate.

A7.5.2.1.4. Use of barriers for spear type items.

A7.5.2.1.5. Winch an item of rolling stock into the aircraft.

A7.6. Systems 6 - Fleet Service / Passenger Handling Techniques:

A7.6.1. Fleet service; supplies and equipment, meals and forms.

A7.6.2. Aircraft cleanliness.

A7.6.3. Passenger handling techniques:

A7.6.3.1. Review the responsibilities and duties of the loadmaster for troop flights.

A7.6.3.1.1. Seating, briefings, meals and comfort items, emergency procedures and equipment, duties and relations.

A7.7. Systems 7 - Emergency Procedures Tactics:

A7.7.1. Emergency procedures:

A7.7.1.1. Review emergency procedures outlined in T.O. 1C-130(E)J-1, and ATP-56(B) that pertains to the loadmaster.

A7.7.1.1.1. Current trends of accidents, incidents, equipment malfunctions and crew resource management.

A7.7.1.1.2. Ground operations.

A7.7.1.1.3. In-flight.

A7.7.1.1.4. Landing.

A7.7.1.2. Review jettison procedures in T.O. 1C-130(E)J-1 and T.O. 1C-130J-9.

A7.7.2. Tactics:

A7.7.2.1. Review equipment and procedures used in combat situations.

A7.7.2.1.1. Scanner duties and responsibilities as described in AFTTP 3-3.E/MC-130 *Combat Aircraft Fundamentals E/MC-130J*

A7.7.2.1.2. Complete visual threat recognition awareness trainer (VTRAT) refresher.

Attachment 8**SAMPLE UPGRADE NOMINATION LETTER**

MEMORANDUM FOR 193 SOS/CC

FROM: 193 OSF/OST

SUBJECT: Nomination for Pilot Instructor Qualification

1. 193 DOOP nominates 1Lt John A. Smith EC130PIP (use full course identification) class 200601. His personal information is as follows:

Last four of SSAN:	xxxx
Security Clearance:	Verified in JPAS to meet prerequisites

2. Individual has been briefed by the unit training officer or unit commander's representative and accepts the appropriate ADSC per the Education and Training Course Announcements (ETCA) and AFI 11-EC-130J, Vol. 1.

3. For instructor qualification courses a Flight Instructor Preparatory (FIP), AITC, or equivalent course requirement statement is required. It must state if the nominee requires the training, has completed it, or was a prior qualified flight instructor.

4. Any questions may be directed to (unit training officer) at DSN XXX-XXXX.

Squadron DO or CC signature block